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ABSTRACT

This booklet describes the goals and organization of many early childhood Title I (ECT-I) parent programs and suggests evaluation methods. The information is intended for program planners, evaluation personnel, and teachers. Only activities that involve parents in the education of their child so as to improve his academic competence are discussed. The methods of parent education are difficult to define. Many parents may have access to successful child rearing information, but are unable to implement these ideas. There is also no evidence of a causal relationship between specific parental and child behavior. Most programs of parent participation provide joint activities to develop a child's language and cognitive skills. Other programs emphasize the process of learning as more important than the content. These programs encourage parents to allow exploration in a safe and stimulating environment. A multi-faceted evaluation strategy is necessary which is matched to the program. Evaluation should focus on the program, not the parents. Instruments should be short, simple, and readily analyzed to yield information useful for program improvement. Parents should be involved in planning, implementing and evaluating their own programs. (DWH)

The Huron Institute

EVALUATING TITLE I PARENT EDUCATION PROGRAMS

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FOREWORD

This booklet has been prepared as part of a project sponsored by the United States Education Department (USED) on evaluation in early childhood Title I (ECT-I) programs. It is one of a series of resource books developed in response to concerns expressed by state and local personnel about early childhood Title I programs. The series describes an array of diverse evaluation activities and outlines how each of these might contribute to improving local programs. The series revolves around a set of questions:

- Who will use the evaluation results?
- What kinds of information are users likely to find most helpful?
- In what ways might this information aid in program improvement?
- Are the potential benefits substantial enough to justify the cost and effort of evaluation?

Together, the resource books address a range of issues relevant to the evaluation of early childhood programs for educationally disadvantaged children. The series comprises the following volumes:

- Evaluating Title I Early Childhood Programs: An Overview
- Assessment in Early Childhood Education
- Short-Term Impact Evaluation of Early Childhood Title I Programs
- An Introduction to the Value-Added Model and Its Use in Short-Term Impact Assessment
- Evaluation Approaches: A Focus on Improving Early Childhood Title I Programs
- Longitudinal Evaluation Systems for Early Childhood Title I Programs
- Evaluating Title I Parent Education Programs

The development of this series follows extensive field work on ECT-I programs (Yurchak & Bryk, 1979). In the course of that research, we

identified a number of concerns that SEA and LEA officials had about ECT-I programs, and the kinds of information that might be helpful in addressing them. Each resource book in the series thus deals with a specific concern or set of concerns. The books and the evaluation approaches they describe do not, however, constitute a comprehensive evaluation system to be uniformly applied by all. Our feasibility analysis (Bryk, Apling, & Mathews, 1978) indicated that such a system could not efficiently respond to the specific issues of interest in any single district at any given time. Rather, LEA personnel might wish to draw upon one or more of the approaches we describe, tailoring their effort to fit the particular problem confronting them.

Finally, the resource books are not comprehensive technical manuals. Their purpose is to help local school personnel identify issues that might merit further examination and to guide the choice of suitable evaluation strategies to address those issues. Additional information and assistance in using the various evaluation strategies are available in the more technical publications cited at the end of each volume, and from the Technical Assistance Centers in the ten national regions.

TABLE OF CONTENTS

LIST OF FIGURES

I. INTRODUCTION

This resource book briefly discusses the issues and challenges of evaluating Title I programs for the parents of young children. It describes the goals and organization of many early childhood Title I (ECT-I) parent programs and presents various ways of evaluating them. The booklet is intended for program planners, evaluation personnel, and teachers. Some of those persons will already know something of Title I evaluation but may not be familiar with the special issues of evaluating parent programs. Others may be knowledgeable about programs for parents but unaware of ways in which evaluation can be used to improve what they are doing.

The book is organized into six chapters. Chapter II explains the rationale for programs for the parents of young children and describes several types of program currently funded under Title I. In Chapter III we discuss evaluation plans: why evaluation might be done and what decisions it might inform. We also examine issues of technical quality and point out why expectations for evaluations of programs for parents must be more modest than those for evaluation of other types of program. In Chapter IV we discuss meeting individual needs and assessing individual growth of parents, and Chapter V presents some techniques for gathering descriptive information about programs and for evaluating their effectiveness. In the last chapter we summarize some of the challenging issues involved in evaluating programs for parents. Finally, we provide references to sources of further information on the topics treated in this resource book.

A few general comments are in order. First, we treat here only those activities that involve parents in the education of their child so as to improve that child's academic competence. More comprehensive activities--

for example, job training or personal counseling, such as in the Follow Through supplementary training component of the Child and Family Resource Program--are often an important part of parent involvement; however, as they are beyond the scope of programs currently allowed by Title I, they are omitted from our discussion.

Second, this book--like all the resource books in the series--stresses the usefulness of evaluation to LEA decision making, and particularly for purposes of program management and improvement. If the evaluation of programs for parents can reduce uncertainties and help decision makers in their tasks, it is well worth pursuing. If it cannot, it might better be left undone.

Finally, experts agree that for reasons both methodological and ethical, evaluating programs for parents presents special challenges. In our survey of parent programs, we sought information on evaluation techniques from many sources. First we consulted academicians and practitioners particularly knowledgeable in the area of parent education. Then we examined the usefulness to ECT-I parent programs of the tests of mother-child interaction cited in the Test Collection of the Educational Testing Service. We also conducted an ERIC search for parent education programs. We sent 300 letters of inquiry to all programs identified there, to programs listed in Education Programs That Work (United States Office of Education, 1978) that include parent components, and to programs included in the Interim Handicapped Children's Early Education Program (HCEEP) Overview and Directory, developed by the BEH (1978). We received over 100 replies covering a wide range of programs. Most of these described their parent involvement component, but few specifically discussed the means of evaluating it. Some said they simply did not know

how to evaluate programs for parents. Almost all concurred that the task is particularly difficult. Specifically, many expressed frustration over the following:

- The technical quality of available assessment measures
- The difficulty of matching measures to their program or population
- The inability to allow for the particular aptitude-environment-treatment interactions between each parent and the program
- Reluctance to intrude on family privacy.

In spite of these sobering realities, most program personnel remain committed to and enthusiastic about programs for parents and believe in the efficacy of their own programs. Moreover, they demonstrate ingenuity and resourcefulness in designing ways to evaluate and then improve them. It is our hope that this book can transmit their ideas and so help resolve the evaluation dilemmas facing other programs for parents.

II. TITLE I PROGRAMS FOR PARENTS OF YOUNG CHILDREN

One clear trend in early childhood education since the 1960s has been increased emphasis on parent involvement (Haney, et al., 1980; Datta, 1975). Title I of the Elementary and Secondary Education Act (ESEA) of 1956 (as amended) has greatly influenced that trend. In this chapter we briefly review the history of programs for parents, the types of programs that have evolved, and the specific provisions of Title I that determine the nature of parent programs under its aegis. Then we consider the implications of various approaches to program evaluation.

RATIONALE FOR PROGRAMS FOR PARENTS OF YOUNG CHILDREN

Education programs for parents are not new. Over the years various programs have aimed at helping parents promote their children's moral development, emotional and social growth, physical and mental well-being, cognitive development, and academic achievement. Most recent efforts have concentrated on enhancing cognitive skill and academic achievement, particularly among children of poor families. These activities have come about for three reasons. First, when preliminary evidence suggested that compensatory preschool education programs alone brought no sustained improvement in children's intellect or academic performance, program planners sought more effective means of intervention for educationally deprived children than the simple notion of a year of prekindergarten. Second, new research findings pointed to the importance of the early years of life in stimulating children's curiosity, propensity to explore, and later cognitive functioning. They also suggested that since the role of parents in early child development is crucial, programs starting during the first years of a child's life might be more effective if they had intensive parental participation. Finally, increased public demand

that education programs be made accountable to the community led to provisions not only guaranteeing parental rights to plan, review, and evaluate programs, but, in theory at least, establishing a partnership between parents and schools to insure the best educational opportunity for children.

Taken together, these ideas generated a variety of programs for parents of young children. Such programs are built on the supposition that parents, even more than teachers, can respond appropriately to their children and provide an early and continuing environment of stimulation, security, and affection. If some parents fail to provide the necessary support, it is not through intent, but because they do not know how. These parents can be taught the rudiments of child development and guided to activities and ways of interacting that will help their children learn. Education programs can provide parents with opportunities to practice new skills. Moreover, once the parents have been adequately instructed, their new knowledge will carry over to other children in the family, and the family environment will become richer, more stimulating, and more appropriate to the development of all its children.

However, there is no clear order of importance in the various findings about the way children learn. Nor has it been shown that there is a single best way for parents and children to interact or for parents to take part in their child's education. Therefore, there has been a proliferation of programs, differently organized and with different goals, reflecting different notions on the best way to involve parents. We have identified four models: the indirect information model, the direct instruction model, the resource volunteer model, and a model involving parents as policy makers. The indirect information model uses program staff to inform the parents about the program and the child's progress. Conferences, report cards,

general meetings, and information bulletins are common ways to do this. The basic assumption in programs like this is that parents serve best as reinforcers of school learning. The more they know about their child's school program the more they can--and will--support it at home. The second model, direct instruction, teaches parents how to instruct their children, although there is some disagreement on how this is best done. These parent education or parent training programs have been variously designed to help parents understand child development in general, to take account of their own children's characteristics, to develop specific skills in instruction or interaction, and to provide an "optimal match" between children's needs and their education. In these programs parents are both students and teachers, and must both learn what to do and transmit that knowledge effectively to their children.

A third type of parent program relies on parent participation in volunteer or support activities. Program staff define parents' opportunities--or responsibilities--for support, including such things as serving as volunteer aides, accompanying the class on trips, raising funds for program use, and participating in school clean-up or construction activities. Through parents' association with school activities, proponents of these programs hope to promote favorable attitudes toward the program that will indirectly lead to a supportive attitude at home and to improved school performance.

Finally, many programs have tried to involve parents as advisors or policy makers. Through advisory boards or councils, parents may participate in planning program modifications and in needs assessment or evaluation, or act as advocates for the program within the community or in a larger political arena.

TITLE I PARENT PROGRAMS

Let us now review the provisions of Title I of the Elementary and Secondary Education Act that relate to parent involvement and examine how they are applied in ECT-I programs. Both the provisions themselves and the ways in which they are applied have important implications for program evaluation.

Title I requires that Local Educational Agencies (LEAs) involve parents in two ways: (1) in governance and policy making, and (2) in education programs. The former takes place through Parent Advisory Councils (PACs), and these are subject to a number of regulations. Title I legislation and rules are more open about the latter, allowing considerable latitude for local decisions about the purpose, content, and organization of parent participation in education programs.

Parent Advisory Councils

Parents participate in Title I program governance and policy making via Parent Advisory Councils. Composition of and eligibility for PACs is clearly specified. Section 125 states that an LEA may receive funds under this title only if it establishes a Parent Advisory Council for its entire school district and for each project area or project school.* PAC members must be elected by the parents of children to be served by projects assisted by Title I. The district PAC must also include representatives of children in schools eligible for but not participating in Title I programs. For project areas or project schools in which 75 or more children are served, there are additional requirements as to the size of the PAC, membership, responsibility for electing officers, and frequency of meetings [Sec. 125 (a)].

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* An exception is made in cases where not more than one full-time equivalent staff member is paid with Title I funds, and where not more than 40 students participate in the program [Sec. 125 (a) (B)].

The tasks of PACs are more generally stated than is their organization. Thus Section 125 requires that:

> Each local education agency shall give each advisory council which it establishes under subsection (a) responsibility for advising it in planning for, and implementation and evaluation of, its programs and projects assisted under this title.

How these tasks are carried out is determined within local education agencies.

In order to assist PACs with their responsibilities, LEAs must provide each PAC member with: the text of Title I; all federal regulations and guidelines issued under or associated with it; all appropriate regulations and guidelines associated with the title; and any report resulting from state or federal auditing, monitoring, or evaluation in the district [Sec. 125 (c)]. To enable PACs to use that information and to function knowledgeably, LEAs must provide a training program for parents, but the content of that program is not specified. The legislation states only that the program:

> (1) shall be planned in full consultation with the members of such advisory councils;
>
> (2) shall provide each member of such councils with appropriate materials; and
>
> (3) may permit the use of funds under this title for expenses associated with such training, including expenses associated with the attendance of such members at training sessions.
>
> [Sec. 125 (d) (b)]

How parents are trained is thus a local metter.

Participation in Program Activities

Two sections of Title I describe parental participation in education programs. Section 124 (1) states:

> A. Local education agencies may receive funds under this title only if parents of children participating in programs

> assisted under this section are permitted to participate in the establishment of such programs and are informed of and permitted to make recommendations with respect to the instructional goals of such programs and the progress of the children in such programs, and such parents are afforded opportunities to assist their children in achieving such goals.

Section 117 (c) provides for access to information parents need:

> E. Each local education agency which applies for or receives funds under this title shall make the application and all pertinent documents related thereto available to parents, teachers and other members of the general public.

However, Title I does not spell out how information is to be made available or how parents are to take part in establishing programs, making recommendations about program goals, evaluating their children's progress, and helping their children to achieve goals. As a result, LEAs interpret the provisions in various ways, and parent involvement in Title I takes on all of the aspects we have described: information sharing, parent education, volunteer work, and governance. Programs reflect local needs and resources as well as local administrative capabilities. Moreover, in general, programs for parents change as the children grow older. For the parents of young children, parent education actitivies tend to be projects, while programs for parents of older children are often subsumed under the more general activities of PACs.

IMPLICATIONS FOR EVALUATION

Because programs for parents are so diverse, they will differ in their effects on both parents and children. Therefore, any attempt to evaluate a program will have to take careful account of its goals. What was done and how well can be judged only against the backdrop of what was intended.

There are many ways of organizing the goals of Title I parent programs. One simply way is to consider them in two broad classes: those directed at

changing parents' knowledge, attitudes, and behavior with respect to their children's learning; and those designed to change parents' knowledge, attitudes, and behavior toward school services and personnel.* Figure 1 summarizes the two goal areas and gives examples of typical objectives in each.

Parent education programs concerned with fostering knowledge about child development and the learning tasks of young children (Cell A) might instruct parents on topics such as how to understand age-appropriate child behavior, or teaching techniques. A reasonable subject for instruction would be reading readiness. Program personnel might describe to parents the various skills involved, such as letter recognition, auditory sequencing, and visual scanning; suggest ways to motivate the child to learn; and finally, provide reading readiness activities or perhaps easy reading materials.

Programs focusing on parental attitudes toward children's learning (Cell B) would help parents to recognize their child's characteristics and to develop appropriate expectations of the child. They might try to make parents aware of their attitudes and beliefs about their child, perhaps by role playing or by video-taping simulated parent-child interactions. In these programs, parents are encouraged to believe that the way they interact with their children makes a difference to their children's learning. They are helped to feel more comfortable and secure in their roles as home teachers of their children. At the same time, the importance of being readily accessible to their children and of conveying interest and approval may be stressed.

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* There are also programs with goals that go beyond the parental role and try to meet the personal needs of parents as adults. Since these are beyond the scope of activities allowed under Title I, we exclude them from this discussion.

Goal: To Produce Change in	Focus	
	Toward Child	Toward School
Parents' Knowledge	A To understand the child's educational, emotional, and health (including nutritional and dental) needs To know what play material is appropriate at different ages To know what the child should be learning and how best to help him learn	D To be aware of services available and how to use them, e.g., referral for special education To know what tasks the child is working on in school To be aware of the provisions of Title I and the federal regulations and guidelines associated with it To understand and use program evaluation reports in planning program activities
Parents' Attitudes	B To appreciate the child's individual characteristics of temperament and learning To develop realistic and flexible expectations of the child	E To trust school personnel and view themselves as partners of the schools in the evaluation process To view themselves as important in the success of their child's education
Parents' Behavior	C To adapt behavior--such as verbal behavior and patterns of responsiveness, availability, and supportiveness--in ways that will promote the child's growth and development To provide appropriate instruction in school readiness activities	F To seek appropriate services, e.g., referral for special education To initiate and attend conferences with teachers as appropriate To participate in PAC meetings and other planning, implementation, and evaluation activities To help other parents become involved in Title I activities

Figure 1: Examples of Goals for Parent Involvement

Finally, parents are helped to provide material and experiences that are interesting and challenging to their child at each stage of development.

Parent education programs in which the main goal is to change the way parents teach their children (Cell C) usually provide more directive activities. They show parents how their actions--how they speak and respond to their children, and how supportive they are--affect the child. Parents might also be shown how to use appropriate rewards to reinforce achievement. In addition, these programs instruct parents how to teach their children school readiness skills--for example, by demonstrating how to use simple letter games to help their children with letter recognition.

Turning now to programs that focus on parental knowledge, attitudes, and behavior with respect to schools and the educational process, we see activities of a somewhat different sort. Cell D illustrates the first of these. Many parents, especially those who come from poverty, have had bad experiences with public institutions, including the schools. Their perception of education and schools is colored by feelings and values that sometimes preclude effective collaboration. Often the most needy parents are also the most reluctant to deal directly with school personnel, either about their child's education or about more general program issues. The goals of many parent education programs therefore include breaking through this reserve by giving parents full, easily understood information about the program: what it offers, especially as it relates to their child; how to reach the services and personnel that will help; how effective the program has been; other programs and services; and how to initiate changes that seem desirable. At the same time, program personnel may seize the opportunity to acquaint interested parents with the provisions of Title I and the associated

regulations and guidelines. They may also tell them about the program evaluation report, and perhaps involve them in evaluation activities.

Closely related to these are the goals that fall in Cell E. Many projects now strive to change parental attitudes toward the schools. They ask parents to become active advocates, not only for their own children but in planning optimal Title I program activities for all eligible children. They try to develop trust between parents and school personnel, a sense of being partners working together in the best interests of all children. They encourage parents to view themselves as important to the success of their child's education.

Finally, in Cell F we have changes in the ways parents relate to the school and the education process. Seeking parent involvement in order to assure program accountability appears in this domain. Examples of other objectives are: to have parents attend parent-teacher conferences with appropriate frequency; to request special services when necessary; to participate in PAC activities, and attend PAC meetings.

In practice, of course, programs have many goals. While evaluation need not deal with all of them, it should be a valid assessment of at least some of the significant ones. Each program must therefore decide which of its goals are the most important and hence merit attention in evaluation. A variety of techniques are available for obtaining the information needed to evaluate progress toward those goals and to assess other program facets of interest, such as the opportunities for parental involvement, parents' reactions to the program and its usefulness, or the short- and long-term effects of the program on children's learning. These techniques include unobtrusive measures, parent reports, and rating scales; tests and direct observations (teacher ratings, home observations, observation of parent-child interaction);

and self-study and process evaluation. Which of these are used depends largely upon the focus of the evaluation.

In the following, we first describe how to plan an evaluation. We then discuss the Family Education Plan, which guides the formulation of program goals and the assessment of program effects on families. Finally, we examine the various techniques available for gathering the information needed for program evaluation.

III. PLANNING AN EVALUATION

Sometimes good fortune and good planning combine to permit program planners and evaluators to develop education programs and their evaluations concurrently. The former clarify program objectives as the latter establish the best ways to determine whether those objectives are being met. Moreover, beyond assessing the fit between program aims and their attainment, evaluation can have an additional function: It can provide information to help with the myriad decisions that must be made about the program--and provide it at the right time, when it is most likely to be useful for maintaining and improving the program.

WHAT DO YOU WANT TO KNOW?

The first key issue in planning the evaluation is, why conduct it at all: what kinds of decision must be made, and in what order? Almost always more than one kind of decision is pending at the same time, so evaluation plans for many programs have more than one component. For example, in one Colorado education program for parents of preschool children, it was decided that the most important questions were:

- Did the program deliver the services it promised as frequently as it said it would?
- How did participating parents react to the program?
- What was the short-term effect of the program on the children of its participants?

The evaluation thus had three components. First, records of scheduled home visits and meetings showed how often the program enabled parents to participate, while attendance figures showed how often individual parents did so, which of them used the program most, which services they used most, amount of use at various times of year, and whether frequency of program use was

associated with children's achievement. Second, a survey conducted at the end of the school year revealed what parents saw as the strengths and weaknesses of the program and how they thought it had affected them. This suggested to the program director and teachers where improvement was needed for the next year. Finally, scores on school readiness tests indicated the program's short-term impact. Although there was no formal control group, the scores of participants' children were compared with those of children enrolled in the Title I kindergarten whose parents had not participated in the parent program, and were found to be significantly higher.

Other programs for parents might focus evaluation efforts on other issues. If, for example, they wish to know about the effectiveness of the information about the program that they distribute to parents, they might ask:

- Do the parents read the reports or newsletters sent home?
- Do they use the information? For example, do they know what activities their child's class is concentrating on or what tasks the children are learning? Do they know when the next parent meeting will take place, and are they planning to attend?
- If they use the information, how do they do so?
- If they do not, why not?

Parent educators might want the answers to other questions:

- Do parents who participate in parent programs change their way of teaching or behaving with their children?
- Do participating parents use other community services differently?
- Do the children of parents who participate in their school activities have different attitudes toward school than children whose parents do not participate?
- Do they achieve any better?

When parent participation consists in volunteer activities, evaluation questions might be phrased in terms of frequency of participation, amount of money raised, number of projects completed, frequency of parents' outside speaking engagements, and the like. Finally, governance as the primary focus requires a careful examination of the decisions made, how they are reached, whether or not they are put into practice, and how competent parents feel in the role of advisor.

Evaluations can be designed so as to answer all of these and a great many other questions. The first challenge is to agree on which decisions are the most crucial, and--since trade-offs are sometimes necessary--which may have to be deferred, at least for a while. Alternatively, it may be reasonable to focus on one set of decisions when a program is getting started and another when it is firmly established. In any case, once evaluators, program staff, and parents have looked closely at the program goals to see what the program purports to do, they must then list the possible decisions to be made and the kind of information necessary to make them.

WHAT ROLE WILL PARENTS PLAY?

A second key issue is the role of parents in the evaluation. The most obvious, although by no means the only one, is that of objects of evaluation. Evaluation as program staff examine the short-term impact of the program, or its later effect on parents' knowledge, attitudes, or behavior. Parents take tests, fill in questionnaires, or allow themselves or their homes to be observed so that program effectiveness may be estimated.

While this kind of traditional measurement may be valuable for some purposes, we suggest a different technique that many programs enthusiastically report: to have parents act as agents of the evaluation instead of--or in

addition to--being its objects. Many parent education programs find it useful and economical to involve parents at every step in planning, implementing, and evaluating their own programs. Program staff and parents jointly assess the need for a program, identify goals for the program as a whole and for individual parents, determine a useful system of service delivery, and finally document implementation and evaluate the effect of the program. Education for parents thus becomes education with parents. Some of these tasks, such as assisting in program planning and evaluation, are ideal activities for PACs. Others, such as setting individual goals and assessing individual progress, lend themselves better to joint planning by teacher and parent. For evaluation purposes, this kind of involvement means that although they may need training and support, parents help to decide what information to collect, how to analyze it, and how to use it. It also probably means that data will be easy to collect and analyze. Results should be presented clearly and simply, so that they can be readily translated into appropriate changes in individual programs, and later into decisions about the total program.

WHAT ABOUT A CONTROL OR COMPARISON GROUP?

A third key decision concerns the standard against which the program can be judged. Under ideal circumstances a well-designed experiment is the best way to evaluate the effects of a program, because it sheds light on cause and effect. Unfortunately, experiments are rarely feasible for evaluating Title I programs for parents. The simplest case of a conventional experiment requires the following steps:

- Identify the population to be examined (parents of young children eligible for Title I assistance) and select a sample from it
- Use random or some other probabilistic assignment to divide the sample into two homogeneous groups, a treatment group and a control group

- Ensure that the two groups remain as much alike as possible, except for participation of the treatment group in the program
- At the end of the program, compare the two groups on variables of interest.

For a number of reasons, these requirements are difficult to meet in programs for parents.* First, it is hard to know how to define an eligible population of parents. Are social and economic variables enough? Eligibility requirements for Title I programs in general decree that they are not. Should parental competence be measured in some way? Our later discussion will show that this cannot be done at all validly. How about children's competence? Should parents be identified and then matched by their children's performance on one test or another? The predictive validity of young children's performance on tests is also weak. Second, even if eligibility can be agreed upon, identifying candidates and then selecting from among them is difficult. Schools lack jurisdiction over parents, and parents' lives are seldom geared to school calendars and schedules. All schools can do is make a program available. Parents must decide whether they wish to join and can arrange to do so, (Haney, 1980). Third, as we have seen, participation cannot be randomly arranged. Some parents will be more willing to join the program than others. Whatever the reasons for this, participating parents probably do not represent ECT-I parents as a whole; therefore the results of an evaluation can rarely be generalized to parents who do not participate. Moreover, randomly assigning some volunteers to the program and others to the control

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* For a more detailed--but easily understood--discussion of the methodological issues of evaluating parent education programs, the reader is referred to Gray, S. and Wandersman, L., The Methodology of Home-Based Intervention Studies, Child Development, 1980, 51, 993-1009.

group is impractical: imagine telling half the parents who want to join your program that they can't, but that you still would like to collect data from them!

Even if a program group and control group can be set up, difficulties almost inevitably arise in maintaining them. Parents in the program may decide that they don't like it or don't have the time; and parents in the control group, who had little incentive to participate anyway, may not be available for later assessment. Thus the group, originally comparable, may be quite different when the program ends, which will distort the results.

Another requirement for experimental integrity is ensuring that the control group does not receive the program. This is not always easy. For example, some of the parents in the two groups may be friends. Those in the treatment group will discuss what they have learned with those in the control group. Or parents in the control group may seek out and participate in a comparable program: if they joined from interest in your program, their disappointment at being excluded may lead them to that alternative--which may also have positive effects. Thus when the two groups are compared, little difference will be found. The obvious--but incorrect--conclusion is that the program doesn't work.

We see, then, that the theoretical advantage of experiments and quasi-experiments* often disappears when we use them to evaluate ECT-I programs for parents. Instead of obtaining unequivocal information on program effects, we may end up confused or misinformed about the worth of the program. Therefore, evaluators and planners in many programs have turned to less rigorous

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* We have concentrated on the problems of true experiments, but the difficulties are similar in quasi-experiments using equivalent control groups or time series.

but more practical methods that link evaluation to the needs of families or to program management and development. In the former, evaluation often consists in developing an individual Family Education Plan with each family, and then jointly determining whether it was implemented as prescribed and assessing its effects. In the latter, evaluation focuses on the program, carefully describing what took place and how parents felt about participating in it.

IV. FAMILY EDUCATION PLANS

Perhaps the biggest challenge to those who develop and run programs for parents is to take account of the enormous differences among families. In the broadest sense, families differ in the goals that they have for themselves and their children, in the cultural values and experiences they bring to child rearing, in their attitudes toward education in the public school system, and in their personal style and tolerance for particular child behavior. For example, the mother of three preschool children might be expected to spend far less time interacting with each child, and to be less immediately responsive to each child's overtures, than a mother who has only one small child. On the other hand she might time her interactions more skillfully or respond more appropriately than a first-time mother. Similarly, parents whose experience with school personnel has been as subordinates, and whose own education has not led to success and fulfillment, might be expected to respond quite differently to teachers and home visitors than parents who view education as a means to a better life. Program personnel quite reasonably try to tailor their expectations, their teaching styles, and even the content of programs to each family's needs. One way of doing this is to develop a Family Education Plan (FEP).*

The FEP resembles the concept of the Individualized Education Plan (IEP) that LEAs must develop for all handicapped children under PL 94-142 (the Education for All Handicapped Act). While the process of devising IEPs varies somewhat from program to program, the steps that are standard and that directly apply to developing FEPs are these: jointly assess individual needs and determine goals; decide how to meet these needs; implement the

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* The authors are indebted to Christine Dwyer of the Title I Technical Assistance Center in Region I for her helpful suggestion in expanding and refining the concept of the FEP.

decision; see how well the needs are being met; modify program goals and adapt procedures. Assessment then becomes a measure of individual progress as well as a planning step for the next phase of the program.

There are several ways to go about determining individual parental needs. One is a questionnaire such as that illustrated in Figure 2. This is useful in first defining the areas in which parents want help and later showing how the parents feel the program responded and how much they have learned. In the questionnaire shown, the range of topics is broad; other programs may offer a more modest choice, and a much simpler questionnaire might be developed to reflect that range. Note that the questionnaire clearly implies that certain parental needs can be met; it is therefore very important that the program actually be capable of meeting them. Unrealistic promises lead to thwarted expectations and feelings of failure all around.

The next step in determining the needs of parents is for staff to confer with parents at the outset of the program. A few questions about their child, themselves, and how they wish to participate in the program should lead to initial goals and a tentative FEP. As parents and program personnel continue to work together, more specific behavioral goals and a more detailed FEP may be developed and periodically reviewed. An example of the way the process works is the following. A parent may initially wish to help make the child ready for school. The parent may need to know more about this--what skills the child should have, and how to teach them. Together, parent and program staff may decide that the child should learn to enjoy storybooks and know how to look at the details of the pictures. They may determine that the parent will get a library card and read the child one short story each day. At an agreed time several weeks into the program, they may review whether

the library card has been obtained; and a list of the books signed out and read will indicate how well the parent is moving toward the agreed objective.

Critics of the IEP process in special education contend that developing these plans for children is time-consuming and expensive. Federal regulations for the educational handicapped children (PL 94-142) and sometimes state counterparts require that parents, teachers, and other specialists, (e.g., school principals, guidance counselors) meet several times to assess family need and determine educational objectives. Proponents of the process argue equally vigorously that IEPs provide the most directly relevant instruction for each child and generate evaluation information useful at both individual and program level. Moreover, they maintain that FEP procedures need not be as complex. For example, there is no reason why the same classroom multi-disciplinary procedures need be followed for FEP. Unlike programs for handicapped children, developing programs for parents includes relatively little in the way of formal diagnostic evaluation. Hence the potential cast of characters is considerably reduced. Moreover the number of staff available to work with parents is likely to be limited and it seems superfluous to involve staff members who will not participate in the FEP. A small group of potential service providers is perfectly adequate, particularly if one member is identified as a liaison or advocate for the family and assumes responsibility for implementing the FEP. Finally, like the IEP process, the FEP can help to form an alliance between parents and program personnel, so that evaluation becomes an integral part of the program for parents.

H1

Coordinating Sponsor: Ferguson Florissant School District
Parent-Child Early Education

PARENT INTEREST SURVEY

LINK

Date: Phone:

Name

Address

City Zip

CHILDREN: Number ____

PARENTS		Age
	He	
	She	Age:
Length of Residence		School District
		St. Louis Area

Current Age:	Sex:		Birth Date:
____Months	M	F	/ /
1 Year Old	M	F	/ /
2 Years Old	M	F	/ /
3 Years Old	M	F	/ /
____Years Old	M	F	/ /
____Years Old	M	F	/ /

Marital Status: ☐ Married ☐ Separated ☐ Widowed ☐ Divorced ☐ Single

Section A.

TOPICS OF INTEREST

Listed below are several topics. FOR EACH TOPIC, PLEASE MARK (X) to indicate your degree of interest:

	I'm Interested:			Help Provided:					LINK Responded:				I've Learned:			
	A lot	A little	Not at all	Literature	Library	Group Sessions	Referral	Link Other Parents	Very well	Moderately well	Less than I hoped	Not at all	A lot	A moderate amount	A little	Nothing at all
PARENTING																
Nutrition																
Eating during pregnancy: its effects on yours and baby's health																
Establishing sound eating patterns: the first three years																
Planning balanced meals																
Junk food: its effects on health and behavior																
Other:																
Health and Safety																
What to check before calling the doctor																
Recognizing symptoms of childhood diseases																
What to know about first aid																
Ways to prevent accidents																
Other:																
Growth and Development																
What is typical? What to expect and not to expect from birth through 3 years of age																
Ways to prepare your child for success in school from birth -- in terms of physical, social, emotional and intellectual development, including speech, language and coordination																
How babies learn to talk and develop language																
The value of play -- developing social and intellectual skills																
Selecting toys and books appropriate for your child																

Figure 2

	I'm Interested:			Help Provided:				LINK Responded:				I've Learned:			
	A lot	A little	Not at all	Written Materials	Library	Group Sessions	Referral	Link Other Parents	Very well	Moderately well	Less than I hoped	Not at all	A lot	A moderate amount	A little	Nothing at all
Making and finding no-cost or low-cost learning games																
Ways to increase your child's self-confidence																
How to get your child to willingly do what you want him to																
Ways individual differences in personality and abilities of children and parents affect the parent-child relationship																
How to select and prepare babysitters																
How to select day care, nursery schools, preschools																
Dealing with special problems -- bedwetting, slow to talk, picky eating, going to bed without a fuss, etc.																
Use and abuse of TV and its effects on learning																
Teaching values, morals, responsibility																
Sex education and sex roles																
Other:																
COMMUNICATION, RELATIONSHIPS																
Ways to listen and talk with each other																
• Parent to parent																
• Parent to child																
Reading body language																
Making decisions as a family																
Ways for families to talk and work together to solve problems																
Determining what we expect of each other and who does what -- around the house and with the children																
Preparing brothers and sisters for a new arrival																
Promoting healthy, happy relationships between brothers and sisters																
Ways to maintain a good marriage and help it develop as children become part of the family																
Living in harmony together or near relatives, in-laws																
Other:																
SPECIAL NEEDS OR CONCERNS																
Preparing for childbirth																
Special concerns of the high school age parent																
Family adjustments related to divorce																
Special concerns of the single parent																
Special concerns of the blended family (his, hers, ours)																
Adoption																
Accepting and helping a child with a handicap or a special problem																
Other:																

Funded by Danforth Foundation

V. PROGRAM EVALUATION

In Chapter II we mentioned that decision makers seeking to evaluate their programs have at their disposal a number of techniques for gathering the relevant information. These techniques and their strengths and weaknesses are discussed below.

TECHNIQUES FOR GATHERING DESCRIPTIVE INFORMATION

Of all the classes of data, the one used most widely in programs for parents is simple descriptive information. All the programs we surveyed, regardless of their goals or their organization for service delivery, reported collecting some kind of descriptive data to document parents' opportunities for involvement and the ways they choose to participate. In addition to being useful in planning and managing the program, this kind of information is needed for cost analyses and to meet federal accountability requirements. In fact, determining the extent of parent involvement is the only required evaluation of parent activities: in their annual performance reports, state education agencies (SEAs) must provide data, aggregated across all programs, on the number of parents participating in PACs and other parent activities; the number of LEAs that provide Title I funds for PAC activities; community involvement as measured by the number of parents, both Title I and other, who participated; and sustained interest as measured by the mean number of persons who attended PAC meetings. The form to be used in reporting is presented in Figure 3; the data required are minimal.

Unobtrusive Measures

In most cases LEA staff and constituents want to know far more about what their program is doing and tailor the descriptive information they

Advisory Councils

1. Number of elected members of an advisory council who:

   a. were parents of Title I public school students

   b. were parents of Title I nonpublic school students

   c. received training (not necessarily Title I funded training) related to advisory council activities

2. Number of local educational agencies that provided Title I funds for advisory council activities

Parent Activities

1. Number of parents of Title I students involved in the following Title I activities (on each line, count a parent only once):

   a. attended at least one school advisory council meeting

   b. participated in project planning, implementation, and/or evaluation

   c. worked as volunteers in Title I activities outside the Title I classroom (e.g., chaperoned activities, provided transportation, etc.)

2. Number of parents not included in 1 above (e.g., parents of non-Title I students) who were involved in one or more of the Title I activities listed under 1a-d.

Figure 3: ESEA Title I Parent Activity Information

gather to their own needs. That information can generally be gathered by unobtrusive measures, such as simple counts of contacts between parents and the program--attendance at meetings, number of parents who participate in volunteer activities or visit the classroom, number of home visits, number of progress reports signed and returned, number of IEP meetings requiring little effort.. Often conveniently placed sign-in sheets, a numbering system for home visits or progress reports, or a checklist of IEPs completed suffice. In other programs, contact records include details, such as topics discussed, material distributed, referrals to other agencies, new or changed needs or or interests, and plans for further contact (for example, see Figure 4).

Unobtrusive data can provide answers to questions such as the following:

- How many families were served in a given period? How does this figure compare with the estimated number?
- What types of service were given (e.g., home visits, parent conferences, written reports, field trips), and how often?
- How many appointments were missed? What reasons were given? What follow-up was done?
- How many parents continued with the program? How many withdrew?
- How many families needing services were identified? How many received services? Why did the others not receive services?
- How many parents participated in volunteer activities? How often? What activities?
- Did parents give presentations about the program or write letters of support? How many? To what audiences?
- What recommendations and decisions were made by PAC or other parent groups? Were they followed?

The same questions can be case in individual terms, and examination of individual participation can provide useful information for planning programs for individual families.

SUMMARY OF CONTACTS

Date	Topics Discussed	Materials Shared	Referrals to Agencies or Materials	New or Changed Needs or Interests	Things to be Addressed on Next Visit

Figure 4: Parent-School Contacts (from Link Parent Interest Survey)

Thus unobtrusive measures are potentially useful for all types of program: those that simply share information; those that involve parents as teachers; those that rely on parents as volunteers; and those that include parents as policy makers. In terms of program goals, they are most valuable in describing changes in parental behavior toward schools and related organizations.

These measures have several advantages. Information is readily available, and easy and inexpensive to collect: program personnel and parents provide the data each time they meet. Recording each contact takes only instants, and with care the information should be accurate and reliable. Only three cautions are in order. First, since accuracy is essential, those who keep the records should know their purpose and be trained in their use. In some cases, simply understanding why information is recorded will be sufficient motivation for accuracy. In others, reminders may be needed from time to time, and records may have to be checked periodically for completeness and accuracy. Hence our second caution: it is helpful if someone is assigned responsibility for overseeing the data. And third, record systems should in general be simple. There is as much risk in an overelaborate system as in one that contains too little information. Too often a cumbersome system becomes a burden to program staff and parents, and record keeping thus becomes less reliable.

Parent Reports

A second source of constructive and useful information reported by staff in many programs is periodic reports from parents about their involvement in the program and their reactions to it. Almost every program we surveyed uses some kind of questionnaire or interview for that purpose. Most have

developed their own protocols to deal with questions such as:

- Was the program useful?
- Was it efficiently and sensitively carried out?
- Did it do what the parents expected it to?
- Did program personnel provide enough information, and in a form that was useful to parents?
- What might have been done differently, and how?
- Did the program make any difference in the lives of the parents or their children?

Like unobtrusive measures, parental satisfaction scales are reasonable indicators of the success of all four major program types. They are most valuable in documenting changes in parents' attitudes toward their children's learning and toward the schools. Taken together with descriptive data produced through unobtrusive measures, they document how parents feel as well as what they do.

Reports of parental satisfaction are also relatively easy to acquire. Parents are usually willing to provide the necessary information. The form used may be as simple as that presented in Figure 5; or it may be far more complex, requiring that parents rank the program on features such as quality of communication between parents and staff; parents' feeling of efficacy within the program; their perceptions of changes in their own attitude, knowledge, or behavior, and of changes in their children. Often these more complex questionnaires are completed in the presence of a staff member who can help parents with them. They may also be supplemented by a structured interview. Again, we advise simplicity. Parents may not respond to a questionnaire that is hard to understand or takes too long to complete. Those who design these forms may find that "less is more."

1. As a result of participating in this program, I feel that my child:

   — Has shown improvement in speech and language skills _____ yes _____ no

   — Has shown little or no improvement in speech and language skills _____ yes _____ no

   Please explain.

2. As a result of participating in this program, I feel that I (as a parent):

   — Have gained in my understanding of my child's needs and my ability to help him _____ yes _____ no

   — Have gained little or no new understanding of my child's needs and feel no better able to help him with it than I was before I cam to the workshop. _____ yes _____ no

   Please explain.

3. What parts of the program did you find to be most helpful, and why?

4. What parts of the program did you find to be least helpful, and why?

5. What changes would you recommend to be made in the program for next year?

6. Please check one of the following:

   _____ I participated in almost all of the program

   _____ I missed more than five days of the program (or did not participate in full-day sessions)

   _____ I participated in less than half of the program.

Figure 5: Example of Questionnaire for Parents

Although questionnaires and interviews are valuable in documenting parents' feelings about the program and its effects on them and on their children, we must also raise some cautions about them, particularly if they are administered by program staff. Aside from the natural problem the staff may have in being objective about their own program or performance, parents may try to "please the teacher" by providing what they think the information seeker wants. One director pointed out:

> It is my observation that subjective reports often amount to strokes for staff. If you have a dynamic trainer, or even an adequate one, you will often find persons responding to [him] and unable in any systematic way to evaluate the efficacy of the training provided to them.

Parents may also report differently to different interviewers. They are more likely to try to please an interviewer they consider someone in authority (e.g., a program director) or someone they do not want to hurt (e.g., a teacher or home visitor). One way of dealing with this is to use parents more directly, assuming that they will be more honest with other parents. A group of parents, perhaps PAC members, might help decide what information should be asked. With training they may even take charge of this aspect of evaluation, conducting interviews, collecting questionnaires, and even participating in data analysis.

Finally, several program directors reported that they regularly collect this information from parents who leave the program. Responses from this group often tell where the program has gone awry. Such information is particularly useful for improving future efforts.

Rating Scales

A third prevalent means of gathering descriptive data is parent ratings of the instruction received and the impact of the program on them or their child. Parents are asked to assess how much they are learning, and whether they are interacting with or instructing their child differently after participating in the program.

Unfortunately, rating scales are often thought of as measures of program impact, and issues of technical quality quickly arise.* Developing a scale and then adequately assessing its reliability and validity is a difficult and costly process, often beyond the scope of Title I parent programs. Borrowing scales developed by others has occasionally been moderately successful in attempts to rate changes in parent behavior, but we found only two sets of rating scales that have been used with satisfaction by several programs: the Parent Attitude Checklist (Boyd and Stauber, 1977), and the Home Base Survey and Parent Survey, adapted by the Yakima, Washington, Public Schools from the Parent Education Model of Follow Through. The former was developed for a home-visit parent education program. Parents rate their attitudes and behavioral reactions to teaching and child management situations along a 5-point scale ranging from "never" to "always." The items assess parents' knowledge of and participation in techniques of child management and teaching, and parents' role as teacher, their self-confidence, and their attitude toward child discipline.

The Yakima Home Base Survey and Parent Survey consists of brief questions that are answered on a scale of "strongly agree" to "strongly disagree." The questions address parents' perceptions of changes in their own and their child's behavior, their role as a teacher, and the appropriateness of the home environment. Both scales are reviewed in the Appendix.

Personnel in several other programs reported that they had tried to use existing rating scales to assess changes in parents' attitudes, but

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* For a brief but thorough discussion of traditional measurement considerations, the reader is referred to the resource book Assessment in Early Childhood Education (Haney & Gelberg, 1980).

with little success. In the interest of avoiding unnecessary effort for others, we will briefly mention a few of the scales so used. The first was Blaine Porter's Parental Acceptance Scale. Designed for parents of children aged six to ten, this measures parental acceptance of children. Parents rate themselves on a self-inventory questionnaire according to their feelings and actions in relation to their child. Another instrument, the Elias Family Opinion Survey (1952-1954), measures feelings of intra-family homeyness/homelessness, while yet another, the Index of Parental Attitudes (1976), measures parents' contentment in their relationship to their children. A fourth scale that initially was rather widely adopted but was later discarded is Norma Radin's Parental Attitude Research Instrument (PARI) (1958) or its Glasser-Radin Revision (1958). It has been used as a pre- and post-measure of changes in parents' attitudes, and contains Likert-type multiple choice items. Each of the 113 items uses a forced-choice scale. The respondent is asked to agree strongly, agree mildly, disagree mildly, or disagree strongly, and replies are scored 4, 3, 2, and 1 respectively. Totals are obtained for 23 subscales, each containing 5 items.

The paucity of rating scales that have been successfully adopted outside the program for which they were developed leads us to make two suggestions. First, it is wiser for ECT-I parent education programs to make only modest requirements of the technical quality of a parent rating scale, to develop one tied directly to their program, and to use it to improve the program. It can be a rich source of information about what parents think they have learned and how they think they have changed, though it may not be totally accurate or give a full picture of program impact. After all, as research suggests, the supposed beneficiaries of intervention programs are sensitive

about changes in their own attitudes or behavior. Moreover, programs for parents may lead not only to specific short-term changes, but to long-term adjustments in attitude and thus in behavior. Self-rating scales nonetheless offer valuable descriptive information on parents' reactions to the program. If the items of the scale are tied to objectives, program staff can use the data to improve their work.

TECHNIQUES FOR MEASURING SHORT-TERM IMPACT

In some cases it may not be enough to collect good descriptive data on what the program is doing, how it conforms to plans and requirements, and how participants feel about it. In particular, personnel in parent education and parent training programs often want to assess the short-term impact of the program on parents or children. The assessment of young children and of short-term program impact is complex and challenging. It is discussed in two other resource books in this series, Short-Term Impact Evaluations of Early Childhood Title I Programs (Haney, 1980), and Assessment in Early Childhood Eduacation (Haney and Gelberg, 1980). In this book we confine our discussion to the measuring of short-term program effects on parents.

For programs that intend change in parents' knowledge, behavior, or attitudes toward the child, two foci for evaluation have emerged: parent-child interaction or teaching style, and the amount of appropriate stimulation available in the home. Program directors reported the use of tests, observations, and teacher ratings to assess the former, and formal or informal observation and rating of the home environment to assess the latter.

Tests

At first glance, it would seem that the simplest way to determine what a program participant has learned is through a test. Tests are relatively

easy to give and score and their results are simple to analyze. Moreover, if the test is based on criteria derived from the curriculum, item analysis can show program weaknesses and can serve as a basis for recycling parents through material not yet learned. But there are problems with the use of tests. First, almost no standardized tests are available; and developing tests of even modest technical quality is a task beyond the capacity of most ECT-I parent programs. We found only one test whose developers have systematically attended to quality control: the Parent As A Teacher Inventory, reviewed in the Appendix. This measures program impact on the interaction of preschool children and their parents. It can be given individually or in groups and takes 15 to 30 minutes. Parents are asked how they respond in a variety of specific interactions with their child. The responses are then coded into five areas: acceptance of the child's creative development, frustration about child rearing, feelings about control and discipline, understanding of children's play and its influence on development, and confidence as a teacher.

A number of parent programs, particularly those for parents of handicapped children, have developed criterion-referenced or competency tests keyed to their curriculum. For example, Dallas, Texas, has one (Macy, 1978), as has Project RHISEE/Outreach in Rockford, Illinois (Smith, 1979). Such tests are most useful in programs aimed at specific changes in parental behavior. Thus programs with a behaviorist philosophy might define reinforcement procedures for parents to learn, designing several test items to measure their knowledge. Of course, for programs with more diffuse or individual goals, even criterion-referenced tests are difficult to devise.

Beyond the limitations of the measures, there are other problems in trying to test parents. Even if limited technical standards are accepted, taking tests is often frightening to parents, particularly those who have had unpleasant experiences in school. Moreover, since many Title I parents read poorly, simply taking a test may be almost impossible. Third, because parents differ so much in what they bring to the program and expect to learn from it, a single test cannot adequately assess program effects. Finally, there are ethical issues. Many program planners feel that the testing of parents is an unwarranted intrusion into child-rearing practices--an area traditionally left to the family.

As a result of these limitations, we found that few programs formally test parents. Many of those that have tried have abandoned the effort. In those that have not, personnel are uncomfortably aware that the tests do not adequately reflect program objectives or respond to the feelings and needs of the parent group. Most programs therefore have recourse to other methods of assessing program impact.

Observational Techniques

Instead of using tests, some programs have turned to observation. Here observers systematically record parents' behavior according to predetermined guidelines. Observation techniques are particularly appealing because they assess parental behavior directly and apparently show how parents practice what they have learned. They also provide program personnel with specific data for planning further instruction.

We found three observation techniques in use: observation of the home environment, naturalistic observation of parent-child interaction, and controlled observation of parent-child interaction. We will discuss each of these in turn.

Measures of home environment. A number of programs assume that one effect of the program will be to improve the home environment by increasing understanding of the needs of the children. We found several environmental assessment inventories in the literature, but with few exceptions, little evidence of their use beyond the program for which they were developed. One measure was cited over and over again: the Home Observation for Measurement of the Environment (Caldwell & Bradley, 1972), designed for use with children at risk of developmental delay due to environmental deprivation. It consists of a checklist completed by a trained interviewer who visits the family at home. The interviewer records items in areas intended to assess the frequency and stability of adult-child contact, amount of developmental and vocal stimulation, need gratification, emotional climate, avoidance of restriction on motor and exploratory behavior, available play material, and home characteristics indicating parental concern with achievement. The observation takes about one hour.

A second measure is the Cognitive Home Environment Scale (CHES) developed by Radin & Weikart (1966). This also measures the degree of cognitive stimulation in the home, through a combined observation and interview technique. It has been used by several intervention programs, who reportedly found it satisfactory. Both scales are reviewed in the Appendix.

Proponents of home observations believe that they yield greater insight into program effects than do artificial testing solutions, since they more realistically portray the kind and amount of stimulation and support the child receives. Again, however, those considering the use of home environment measures should be aware of potential difficulties.

First, of course, home observations are unavoidably intrusive. Second, if standards of informed consent are upheld, parents are aware that their home is to be assessed and may try to make a favorable impression. A quick cleanup, a hasty trip to the store for some inexpensive but "appropriate" books, a display of play material that may not normally be accessible are all easy ways to get ready for the assessment--and distort its validity. Predictive validity is also an issue. Although Caldwell has shown some evidence that home environment and child outcomes are correlated (1977), no other instrument we know of has been able to do so.

Third, the observer is a source of bias. Selective inclusion or exclusion of objects or events is the most obvious possibility. No observer sees everything, and selecting among the myriad of observable events is critical to the portrait painted by the observation. Extensive and repeated training is the sine qua non for gathering reliable--and relevant--observational data. However, such training is costly; and this must be considered in deciding whether to make home observations.

Observations of parent-child interaction. There are many parent-child interaction scales in the literature (see Measures of Maturation, 1973, for an extensive list and description). Although they are designed to assess the educational climate of the home, there is no agreement on what variables contribute to it. Hence there is the risk of evaluating families by personal factors--e.g., housekeeping standards--that are really beyond the province of the program. Moreover, most of these scales are not applicable to or manageable by ECT-I parent education programs. Before discussing the few examples we found that might be useful in these programs, let us examine why observations of parent-child interaction are worth considering as a element in evaluating parent programs.

The main advantage cited to justify these observations is that they yield a rich body of detailed data about what is really happening between parent and child. The argument is, "Look not at what they say but at what they do." If the data are collected reliably, they are direct evidence of what parents do under specific circumstances. If, for example, it is a goal of the program that parents respond to children's utterances with full sentences, observations can determine how frequently and regularly they do so in daily events such as mealtime or getting ready for bed; or if the goal is to help parents teach through positive verbal reinforcement, observation can show how often a mother praises a child for a task completed. When the parent behaves consistently in ways suggested by the program, a reasonable assumption is that the program is responsible. It has "worked."

Some programs extend the usefulness of their observations by video-taping them and replaying the tapes for subsequent program use. For example, a video-tape of a mother teaching her child to use a new toy might be played back with the mother, allowing her to "see herself as others see her" and to identify elements of her teaching style that she or program staff feel could be improved.

Observations of parent-child interaction range from scales like the Parent Behavior Inventory (Boyd and Stauber, 1977), in which home teachers observe parents informally and rate their performance in various teaching and management tasks, to far more sophisticated and expensive measures. For example, the Mutual Problem-Solving Task, developed by Epstein, Schwartz and Merce (1975), involves systematic observation of mother and child baking cookies together. Behavior is observed and recorded at time-sequenced intervals and then coded by highly trained staff. Categories of behavior

include affect, task involvement, requests for assistance, and responses to requests for assistance.

Levenstein, at the Verbal Interaction Program, has also developed an observation technique (Levenstein, 1978). In this case, each mother-child pair is video-taped for ten minutes of interaction in a standard play situation. The tape is then coded using a program-referenced Maternal Interactive Behavior Scale that includes the following items: gives labels; gives colors; describes actions; gives numbers, shapes; gives information, praise; aids divergence; smiles; replies to child; gives no reply. Video-taping adds to the expense of the procedure, but it also allows for greater quality control than scoring on the scene. Moreover, the tape can be played to the parents. Thus evaluation data can be introduced into the process of program planning.

Although observation techniques are appealing and there may be no real substitute for "taking a look at the program," several issues deserve thought. First, it is important to understand that the process of observing often affects the behavior observed. A parent whose teaching style is being assessed may use positive reinforcement in teaching a new skill, and refrain from scolding or punishing a child, but behave somewhat differently under normal circumstances. Second, most programs make only a single observation, or two at the best: one before the program begins and one when it ends. As responses are likely to reflect momentary fluctuations in parents' typical behavior, judgments based upon a single observation can be expected to be of limited validity.

Third, observation techniques require a highly trained staff using a carefully designed protocol, extensive coding procedures, and often sophisticated analysis techniques. Video-taping requires additional technical

staff and hardware. Together, these elements make observation very expensive. Finally, observation is among the most intrusive types of evaluation. To the extent that issues of invasion of privacy and family rights are salient to program delivery, they may argue against use of these methods.

Teacher ratings. In many programs teachers are asked to rate parents' attitudes, knowledge, and behavior toward their child or the schools--the same questions as in parent assessments, but from the perspective of the teacher. Most of these rating systems are simple checklists of program (or individual family) objectives, and teachers rate growth toward those objectives. Rating is easy and inexpensive to do.

Like parent reports, teacher ratings are a reasonable way of assessing how programs affect parents' attitudes, knowledge, and functioning toward their child or toward the schools. Under careful supervision, the information they yield should be reasonably accurate. A well-trained and perceptive teacher who has worked with a parent or a parent-child pair should be able to say with some confidence how well the lessons were learned. However, circumstances are not always ideal, and we must once again mention possible sources of error.

First, because teachers make an intense commitment of time, energy, and often emotion to each family, they may not always judge change objectively. This is particularly true if they believe that change is also a measure of their own performance. Second, teachers, like everyone else, bring to their job values and expectations that can affect the way they interact with and assess parents. For example, a teacher who perceives a mother as welcoming and pleasant during home visits may also see her as cooperative and eager to learn. Conversely, a mother who seems tired, untidy, or unenthusiastic

may be judged uninterested in the program or even in the child. Separating the bias of teachers' attitudes toward certain parents from their assessment of program effectiveness needs careful thought.

Summary

We have seen that evaluating the short-term impact of programs for parents raises some special difficulties. The most conspicuous of these is the almost total absence of reliable and valid evaluation instruments and procedures. In addition, program objectives usually span a broad spectrum, and objectives for individual parents are often unique; hence the problem of assuring that the assessment of program goals is valid and the evaluation findings are representative. For these reasons, we suggest that ECT-I parent programs concentrate on descriptive studies rather than rigorous studies of short-term program effects. The credibility of descriptive studies can be enhanced by triangulating, or by gathering information from more than one source. For example, program evaluation might include the following components:

- A rating scale to assess parents' perceptions of their own learning
- A rating scale to determine staff perceptions of parents' learning
- A survey of parents' satisfaction with the program
- A reading test to determine whether the child is prepared to cope with the tasks of early schooling.

TECHNIQUES FOR MEASURING LONG-TERM IMPACT AND SUSTAINED EFFECTS

Decision makers in programs for parents may also need to know whether changes in parents' knowledge, attitude, and behavior remained after the parents left the program and whether long-term goals were attained. For example, if at the end of the program parents regularly read to their children more often than formerly, do they continue to do so? After several

years of participating in program activities, do parents develop positive attitudes toward education and hence motivate their children throughout the school years to study and learn? Decision makers want to know whether participation in programs for parents prevents or reduces the likelihood of future school problems such as dropping out, truancy, retention in grade, or persistent infraction of school rules. Finding the answers to these questions requires a longitudinal data base; that is, records on children and families must be kept for as long as possible, preferably from the time children enter school until they leave.*

Longitudinal data can also provide decision makers with useful information for planning parent programs. For example, they can show whether the children of parents who participate in home visit programs do better in school, or later drop out of school less frequently, than children whose parents do not participate. If they do, an argument could be made to continue the program. If they do not, program planners might look for alternatives.**

LEAs that have a longitudinal data system or are considering developing one might do well to include information about families' participation in parent programs. The resource book Longitudinal Information Systems in Early Childhood Title I Programs (Kennedy, 1980) provides helpful information

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* One could, of course, design a longitudinal study that continues far beyond the school years. Indeed, a number of such studies have been done; see, for example, the Fels study (Kagan et al., 1962) or Lois Murphy's study of children's coping ability (Murphy, 1974). However, since the use of Title I funds is confined to programs during the school years (usually kindergarten to grade 12), we will limit our discussion to that period.

** Such comparisons must be made with caution, since other events undoubtedly also contribute to the difference.

on how to set up and maintain such a system. However, there are at least some difficulties in maintaining longitudinal information that are particularly germane to programs for parents.

The first difficulty stems from the mobility of any population. LEA staff agree that Title I families are for the most part highly mobile. Many move from home to home and in doing so are lost to the LEA. Moreover, with the increasing rate of divorce and with changes in family constellations, children often live with different parents or parent surrogates at different times in their school years. A longitudinal data file would probably be unable to track such changes.

Parents' right to privacy is another important issue. It might well be argued that to date, at least, the mandate of schools does not extend beyond the child, and that inclusion of long-term data--even about parents' participation, but more particularly about parents' success or failure in school programs--is a serious invasion of privacy.

TECHNIQUES FOR LINKING PROGRAM PRACTICE TO OUTCOME

Many decision makers want not only to know whether the program did what it promised to, how well, and how parents feel about it, but to understand how program input is linked to program effect, and why the program may have unanticipated consequences. Qualitative evaluation, particularly when it is combined with quantitative program description, is a promising means of providing this information. As Apling and Bryk point out in the resource book Evaluation for Improving Early Childhood Title I Programs (1980): "These methods resemble each other (and differ from others) in that they are based on the idea of 'the evaluator as instrument.' Less emphasis is placed on standardizing data collection activities, and much is left to the

individual evaluator to decide as the evaluation proceeds" (p. 27). Since there are so few standardized measures of program impact on individual parents, these qualitative methods are worth considering. Some of the program improvement practices Apling and Bryk recommend can be easily adapted for parent programs and are particularly amenable to parent or PAC involvement. These include self-study and some process methods.

Self-Study. Self-study is a form of program review in which participants (in this case teachers and parents) assess their own program. For example, in a program that used home visitors to teach parents and children, the director wanted to know whether the technqiue was appropriate for all the families enrolled. She also wondered whether there were other eligible parents in the community who might participate if the program were organized differently. She found that her staff, too, were not sure that their activities met the needs of all their families. As their concerns became focused more specifically, the original set of broad questions was refined. Program staff also identified parents who they thought would be interested in and capable of participating in a process evaluation. These parents were approached and an evaluation study group was formed.

The group met and defined the following seemingly simple questions:

- What services is the program providing?
- Do families receive home visits as often as they were promised?
- Do some families receive more or fewer home visits than others? Why?
- How do families assess home visits?
- How do program staff assess home visits?
- What are the implications of the answers to these questions for next year's program?

Tasks were then assigned to individuals or subcommittees. Fortunately, the home visitors had descriptive records of all their visits. To examine the first question, a subcommittee reviewed these and compiled a profile on each family. The profile showed how many visits had been made, and when; and visits scheduled and then cancelled, and by whom. It also provided a brief account (two or three sentences) of each home visit.

A second subcommittee was asked to design an interview to find out how parents felt about home visits. Together with the director of evaluation in the LEA, this team designed an open-ended interview to be conducted by parents. The director of guidance was brought in to help plan sessions to teach parents the skills of interviewing. The team also extended its mandate slightly by planning a similar interview for home visitors, the program director, and the administrative assistant, so as to evaluate the efficiency of home visits from all perspectives.

The next task was to review the cost of the project. The program director did this, coming up with figures on the total cost of the program and on the cost of individual components such as materials, staff training, consultants, and preparation for and conduct of home visits.

The subcommittee now reconvened. Parents were selected and trained to hold interviews, interviewing first one another and then the remaining program participants. The full group, including the evaluators, met again several times to analyze the results, translate them into plans for the future, and finally write their report.

The report described the committee's findings. Among them was evidence that most families were receiving fewer home visits than promised. Two groups were receiving substantially fewer: working mothers and mothers

under 20 years of age. The first shortfall seemed to be due to scheduling difficulties: mothers were unavailable during the working day. The second occurred because very young mothers did not find home visits helpful, saw the visitors as monitors or social workers, and reported being uncomfortable talking with them. Moreover, interviewers found that many participants felt isolated and were unaware of the community services available to them.

Armed with the study report, program personnel made the following changes:

- Systematized scheduling so that home visits planned and completed were regularly recorded in the program office; this was to motivate staff to follow the home visit schedule as planned.
- Hired one home visitor to work late afternoons, evenings, and weekends, and hence be available to working parents.
- Hired someone to survey the community and list the available services and other resources as well as the means of gaining access to them; a monthly newsletter was issued to update this information.
- Planned group activities where mothers could meet to discuss issues of raising and educating children and other concerns.

In this example, the program staff were the ones who could use the information generated by the self-study, although the report was also available to the administration, the school board, the PAC, and program participants. In addition to program improvement, the evaluation served two other functions. First, data collection was expanded to include continuous updating of family service profiles. Second, the PAC, interested in the extensive involvement of parents in the evaluation, recommended similar self-studies for other phases of the district's Title I program.

Self-study requires a great deal of time from all participants. If they understand its purpose and view it as an opportunity to improve the program, it can greatly enhance communication between parents and program

staff beyond individual parent-teacher contacts. On the other hand, it is essential that the effort be well planned and supervised so as not to digress from its purpose. Committee members must keep in mind what they are trying to do; and they must receive the training and direction they need if the results they report are to be useful for program improvement.

Process Evaluation. Apling and Bryk (1980) describe several types of process evaluation. In this resource book we will consider them as a single class. If the general approach of the process study seems to fit the evaluation needs of a particular program for parents, then evaluators and program planners are referred to Evaluation for Improving Early Childhood Title I Program for help in selecting appropriate procedures.

In many ways process studies are similar to self-studies, but unlike the latter they involve the services of persons other than program staff and participants. The outsiders may be members of the LEA evaluation department, an independent evaluation company, or consultants from a university. Of course these professionals may increase the cost of the evaluation. However, they may also provide more objective information about the program, and the data and subsequent reports may have more credibility with decision makers. Hence, a process study may be useful to a wider audience than a self-study.

Essentially, a process study looks at the links between program input and effect. It enables program planners or evaluators to go beyond what happened and begin to draw some conclusions about why it happened and what influenced the outcome. Let us consider two examples of ways in which process evaluations were used. In a program for parents in a Colorado community, a consulting council of parents, staff and technical service representatives, and physicians was formed to advise the project staff on

policy and program operation, to make recommendations in areas of psychological, social and medical services, and to serve as a link to the community. However, before long the project director noted that things were not going smoothly: the council seemed to be divided into a number of factions. She called in an evaluation team from a nearby university, and two observers attended each of the remaining council meetings. Using observation protocals developed in advance, they recorded certain key features of the meetings. These included:

- Who did what percentage of the talking at the meeting
- Who raised issues or questions for discussion
- Who responded to what kinds of issues
- Who voted how on key issues
- What was the tenor of responses when an issue was raised by parents; by professionals; by staff
- Whether issues were resolved by the end of the meetings
- If questions were left unanswered, whether appropriate follow-up activities were developed.

The evaluators also interviewed council members to investigate questions such as these:

- Who determined meeting time and agenda?
- How convenient were the times to the various members?
- What did members perceive as the most important purpose(s) of the council?
- How well did they feel the council achieved these purposes?

Based on the results, the evaluation team then wrote a report citing ways in which the advisory council was working effectively and ways in which they were unintentionally undermining their own efforts. The report went on to suggest how the council might increase its effectiveness.

A different kind of process study was reported by a parent education program in Massachusetts, which provided a comprehensive system of diagnostic assessment of young children and education for parents. The program had a separate evaluation staff. After the project had operated for several months, the evaluation staff wanted to know how parents viewed the total program and its various component services, and particularly whether staff and participants understood the program in the same way. Under the direction of a member of the evaluation staff, four interviewers held open-ended interviews with the program director, teachers, physicians, nurses, social workers, and parents. Using the program's goals as a framework, they allowed the respondents to pursue the issues that were most important to them.

From the interview data, the evaluators reached tentative conclusions about what aspects of the program were interesting and valuable to various groups of participants. Then they examined the frequency of families' actual participation in the various program components. Putting the two sets of data together they strengthened their conclusions.

This evaluation had an additional result. It found that parents described as important certain functions that were not part of the program description but that staff were unofficially carrying out. Some of these were then elevated to program goals and purposely continued. Process studies can often provide information on serendipitous or unexpected effects.

As Apling and Bryk (1980) point out, the key to success in process evaluations is the quality and training of the evaluators. Observations and interviewing demand highly complex skills as well as sensitivity to the subtleties of situations and personal interaction. Hence they ought not to be undertaken without careful planning and supervision.

VI. SUMMARY

In this resource book we have presented ideas on ways in which LEAs might evaluate their ECT-I programs for parents, which span a range of program goals. Our most striking finding is that tests and measures of parent performance or parent competence are few and are generally of low technical quality. In fact, few have undergone even minimal examination of validity or reliability. Most LEAs and their evaluation advisors have therefore concentrated on describing and assessing their own programs in order to frame recommendations for local program activities. This task is complicated by two factors:

- It is difficult to describe programs accurately and completely;
- There are ethical constraints on evaluation activities.

In this final chapter, we will briefly review these two factors and then summarize the advice given us by educators and evaluators in parent programs across the country.

Our survey of parent programs suggests that defining the methods of parent education programs is an especially difficult problem. Indeed, creators of such programs sometimes have trouble saying just what their program is. There are reasons why it is difficult to be specific, of course. First, parent education and its goals are only a minute portion of the experience of each family. Many families in our society are privileged by having access to information about successful child rearing, and the support and stability within and outside the family to enable them to use that information; but there are others, who may "know what to do" but--because of personal stress, economic need, or excessive demands from any of a number of sources--be simply unable to do it. It is not clear that

for these families it is useful to even try to define goals for instructing their children. One of our correspondents summarized the complexity of matching goals to families. He said, "There is no readily identified or universally accepted developmental sequence for parents as there is for children, and since each family brings to the program not one potential participant but several, each of them needs a different program."

Second, although there is consensus that the parents' influence on the very young child is indeed significant, there really are no normative standards for good parenting. The problem is analogous to that of early childhood education in general. Just as it is not yet possible to define with precision the skills, understandings, and behavior that make for a competent, school-ready child, so it is not possible to define good parenting. To circumvent this dilemna, program planners sometimes try to define objectives in terms of child competence to be promoted through parent programs. However, even when there is agreement on the desired effect on children, there still is no firm evidence of a causal relationship between specific parental behavior and any but the most discrete child behavior. There is, as we have pointed out, some knowledge that suggests desirable parental attitudes and skills, but even here nothing indicates that there is only one way to do the job; different parental attitudes and behavior might lead to similar child outcomes.

Most of the programs that define the objectives of parent participation in terms of effects on the child concentrate on language and cognitive development. They provide joint activities for parent and child to develop these skills. The problem here, of course, is that the relationship between the activity and its effect is usually merely the teacher's or program

developer's best guess, based on little more than personal interpretation and intuition. And of course this approach puts aside for the moment the complicated interaction of cognitive, affective, and motivational development in young children.

Other programs, working on the premise that the process of learning how to learn is more important than the content of what is learned, remain purposely vague about what the child is expected to achieve and how he is to be taught. Parents are encouraged to allow exploration in a prepared (safe and stimulating) environment. They are taught to respond to exploratory behavior in ways intended to facilitate development of the learning process. Indeed, there is some evidence that children reared in a safe and developmentally appropriate environment by parents attuned to their interests and level of development are more competent in areas of language, cognition, and social development. The problem is in defining that match. And certainly one cannot exclude the possibility that there is more than one possible match.

The issues of privacy of families and the rights of parents must also be considered, both in program design and implementation and in evaluation. On the program side, parent education activities, particularly home visit programs, have been challenged as intrusions into child-rearing, an area traditionally reserved to families. Often the program goals do not match family values. For example, in some cultures girls are taught to be quiet and submissive; suggesting that they should explore and manipulate and question may cause conflicts that can be resolved only by compromise--or pretense.

A second ethical concern has been cogently argued by Schlossman (1978): potential "blaming of the victim" (Ryan, 1971). Even with intervention, poor children may continue to fall below the levels of academic competence attained by their more privileged peers. Transferring some responsibility for instruction from the school to the home carries the risk that poor achievement will be blamed on parents. Many programs and evaluation personnel are sensitive to the harm this might do, particularly to parents of low self-esteem, and emphasize program evaluation, not parent evaluation.

There is a third ethical issue. Parents may feel coerced to do things that they do not understand or that they disagree with. Although participation in parent education (and indeed in all parent involvement) is technically voluntary, it is unclear how much choice families really exercise in deciding whether to participate, and, once enrolled, whether to follow the suggestions of program personnel. There is abundant evidence that for many poor families, the school system represents a powerful authority, one that will greatly affect the lives of their children for many years. These families also know that often the school personnel's opinions of the parents and of parental cooperation and motivation will influence their response to the children. It takes courage to reject participation in a program that the school personnel clearly feel will be good for them. This is particularly so with home visit programs. Once a home visitor enters the family's home, it takes enormous courage on the parents' part to challenge or overtly dismiss the advice given.

These ethical issues have implications for program evaluation. If indeed parent programs are an intrusion into child rearing, is not the evaluation of effects on parents a similar intrusion--particularly if it

involves observing behavior in the home or rating it by criteria that involve subjective judgments? If parents' ability to instruct or modify the behavior of their child is influenced by more than the information and knowledge they have at hand, must not the other factors--personal, economic, and societal --also be taken into account? And, finally, how can one tell what happens when the assessment session is over? Does parents' behavior in a testing or evaluation setting carry over into their daily behavior, or does it cease as soon as the evaluator leaves the scene?

In summary, several practical pointers emerge from the reports of our respondents. First, it seems important to have a multifaceted evaluation strategy that is carefully matched to the particular program. Progress toward the broad range of goals espoused by most parent programs can be gauged only through different kinds of evaluation techniques. Parents differ in their need for and ability to make use of program services and are therefore candidates for different assessment measures. And of course each type of measure carried with it certain characteristic sources of error.

Second, evaluation should focus on the program, not the parents. Program directors continually stressed that the success of parent programs depends upon the quality of the relationship, the sense of trust and mutual purpose, that is developed between parents and staff. The role of program personnel is one of instruction and support for parent and child. If learning does not occur, if goals are not achieved, program staff are adamant that the responsibility be clearly placed with the program, not the parents. At the same time, since the personnel resources available to evaluate parent education programs are often confined to busy parents and staff, program staff urge evaluation by instruments that are short, easy to use,

and readily analyzed to yield information useful for program improvement. Hence a third principle: keep it simple.

Fourth, parents should be considered as agents rather than merely objects of evaluation. More and more parent education programs find it useful to involve PACs and individual parents at every step in planning, implementing, and evaluating their own programs. Starting with a joint needs assessment, moving on to determining appropriate individual goals and a usable system of service delivery, and finally assessing the impact of the program, they have evolved the concept of education for parents into education with parents.

NOTES ON SOURCES OF FURTHER INFORMATION

This resource book is only a brief introduction to issues in evaluating programs for parents of young children. Those interested in pursuing the topic further may therefore wish to consult additional sources of information.

GENERAL SOURCES

Of the few general references on evaluation of programs for parents, one helpful source is in Infant Education: A Guide for Helping Handicapped Children in the First Three Years (Caldwell & Stedman, 1977). It treats early childhood intervention programs in general, assessment of young children, and specific programs designed to involve parents and young children in educational activities, and includes a fine account of the issues in evaluating program effectiveness (Chapter IX). Written by Caldwell, the chapter first discusses the purposes of evaluation and then develops a model for formative evaluation of several programs. It is simply and clearly written and integrates scholarly knowledge with common sense.

A second helpful source is Handbook for Measurement and Evaluation in Early Childhood Education, by Goodwin and Driscoll (1980). This volume provides a wide range of information on early childhood assessment in general, but Chapter X focuses on evaluation of parents involvement. While we might disagree with some minor points made here, overall it is as good a summary of evaluation options as we have found anywhere.

A third source of information is Teaching Parents to Teach, edited by Lilly and Trohanis (1976). While this volume does not have a section devoted exclusively to issues of evaluation, it describes nine outstanding programs in detail and summarizes the procedures used in each. Another work,

Parents and the Day Care Center (1969) by Adair and Eckstein, discusses parent participation in terms of parents as actual and potential assets to the program. It develops a parent group profile, a community profile, and channels of communication for more accurate assessment of parental need. The last chapter treats evaluation questions.

In a brief but thoughtful paper presented at the meeting of the Society for Research in Child Development (1979), Levenstein discusses issues relevant to programs for parents, including design, implementation, and evaluation, drawing on 14 years of short-term longitudinal and out-of-project replication of her Mother-Child Home Program.

Finally, in connection with early childhood development programs and services, Planning for Action, edited by McFadden (1972), contains an excellent article by Knitzer, which examines the rationale for parent involvement, argues that parents should have greater control and decision-making power, and offers some ideas how this might be done.

PROGRAM EVALUATION

The systematic use of descriptive data is the topic of Parents Are Teachers by W. Becker (1971). This volume discusses instructional techniques and includes sample forms for recording behavior. While behavior may not be the focus of some programs, the forms nevertheless suggest the types of things parent education programs might find useful. Giesy, in A Guide for Home Visitors (1970), also suggests how to document input. The main theme of this book is home visits and the recordkeeping in programs that rely upon this method.

A particularly useful source of information on documenting program implementation comes from the Systems Development Corporation. This

evaluation group is currently completing a study of parental involvement in four federal education programs. Although the total package of interviews they use to assess the impact of these programs may be far more comprehensive than any single program needs, it is a rich source of ideas. So, too, is Partners With Parents, developed by Hewett (1979) to disseminate the experience of Home Start personnel. This volume contains a chapter on management, part of which treats evaluation and long-range planning. Moreover, the appendix includes examples of the types of evaluation form used.

OBSERVATION

Methods for observing parents are similar to those for observing children. Although we can recommend no specific protocols, there are several good general discussions of the usefulness of formal observation and pointers on how to do it. A particularly good description of the rationale for such observations and of methods for gathering and organizing them is Carini's monograph Observation and Description: An Alternative Methodology for the Investigation of Human Phenomena (1975). Another good discussion is found in Hutt and Hutt, Direct Observation and Measurement of Behavior (1970). Goodwin and Driscoll, in the Handbook for Measurement and Evaluation in Early Childhood Education (1980), also include a chapter on observation practices, and point out that observation is most useful as a complement to other means of evaluation. In simple terms, the chapter outlines the importance of observational measurement, describes formal and informal approaches, and recounts the advantages and disadvantages of observation.

Several collections of observation systems are available. Most systems focus on child behavior, but some deal with parent-child interaction and may provide ideas for instrument development. Among the better

collections are Measures of Maturation, An Anthology of Early Childhood Observation Instruments (Boyer et al., 1973), and Studying Behavior in Natural Settings (Brandt, 1972).

LINKING PROGRAM TO OUTCOME

Among the guides and manuals for conducting self-studies are those produced by the National Study of School Evaluation (1973) and the National Association of Secondary School Principals (Georgiades, 1978). These were not written for use with parents and so must be adapted somewhat, but the ideas are sound.

Information on qualitative evaluations is included in several sources. Perhaps the clearest presentation is found in Getting the Facts by Murphy (1980). This book, intended for evaluators considering investigative research, is readily adaptable to programs wishing to train parents for some types of interviewing. A second source of information is Interviewing: Its Principles and Methods by Garrett (1972). Designed by the Family Service Association of America as a basic test for teaching interviewing to professionals and paraprofessionals, it can easily be used also with parents.

OTHER SOURCES OF INFORMATION

Several additional sources that provide useful information should be noted. The Educational Resources Information Center (ERIC Network) is one of the most valuable. ERIC encompasses a computerized information retrieval system covering a wide range of published and unpublished material. The system is described in NIE's publication ERIC: A Profile, and suggestions on how to use the system are provided in Brown, Sitts, and Yarborough (1975) and Simmons (1975). ERIC has 16 clearinghouses that collect, evaluate, and distribute information on a particular topic area. Three of these that are

relevant to programs for parents are listed below, with notes on the scope of areas they cover.

ERIC Clearinghouse on the Disadvantaged
Columbia University Teachers College
Box 40
525 W. 120th Street
New York, New York 10027
Telephone: (212) 678-3780

Effects of disadvantaged experiences and environments, from birth onward; academic, intellectual, and social performance of disadvantaged children and youth from grade 3 through college entrance; programs and practices that provide learning experiences designed to compensate for special problems of disadvantaged; issues, programs, and practices related (1) to economic and thenic discrimination, segregation, desegregation, and integration in education; and (2) to redressing the curriculum imbalance in the treatment of ethnic minority groups.

ERIC Clearinghouse on Early Childhood Education
University of Illinois
College of Education
805 W. Pennsylvania Avenue
Urbana, Illinois 61801
Telephone: (217) 333-1386

Prenatal factors, parental behavior; the physical, psychological, social, educational, and cultural development of children from birth through the primary grades; educational theory, research, and practice related to the development of young children.

ERIC Clearinghouse on Tests, Measurement, and Evaluation
Educational Testing Service
Princeton, New Jersey 08540
Telephone: (609) 921-9000 ext. 2182

Tests and other measurement devices; evaluation procedures and techniques; application of tests, measurement, or evaluation in educational projects of programs.

More general information on the ERIC system and its other clearinghouses is available from:

Educational Resources Information Center
(Central ERIC)
National Institute of Education
Washington, D.C. 20208
Telephone: (202) 254-5040

TEST COLLECTION

The Educational Testing Service administers the Head Start Test Collection, which was established to provide information about assessment instruments for children from birth to nine years of age. Qualified persons working in early childhood education have access to the collection in person or via mail or phone inquiries. The collection also publishes bibliographies on assessment topics relevant to programs for parents. These include:

- Measures of Child-Rearing Practices and Related Attitudes
- Children's Attitudes toward Parents
- Measures Pertaining to Environments.

For copies of these bibliographies or further information on the Head Start Test Collection, write to:

Head Start Test Collection
Educational Testing Service
Princeton, N.J. 08540

The Title I Technical Assistance Centers serving the ten regional areas of the United States are also sources of information on educational assessment, particularly with respect to Title I evaluation.

Region I: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont

-RMC Research Corporation
400 Fafayette Road
Hampton, N.H. 03842
Telephone: (603) 436-5385
926-8888

Region II: New York, New Jersey, Puerto Rico, and the Virgin Virgin Islands

-Educational Testing Service
Princeton, N.J. 08540
Telephone: (609) 734-5117

Region III: Delaware, Maryland, Pennsylvania, Virginia, West Virginia, and the District of Columbia

-National Testing Service
2634 Chapel Hill Blvd.
Durham, N.C. 27707
Telephone: (919) 493-3451
(800) 334-0077

Region IV: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee

-Educational Testing Service
Southern Regional Office
250 Piedmont Avenue
Suite 2020
Atlanta, Georgia 30326
Telephone: (404) 524-4501

Region V: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin

-Educational Testing Service
1 American Plaza
Evanston, Illinois 60201
Telephone: (312) 869-7700

Region VI: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas

-Powell Associates
3724 Jefferson
Suite 205
Austin, Texas 78731
Telephone: (512) 453-7288
(800) 531-5039

Region VII: Iowa, Kansas, Missouri, and Nebraska

-American Institutes for Research
P.O. Box 1113
Palo Alto, CA 94302
Telephone: (415) 494-0224

Regions VIII, IX and X: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming (Region VIII); Arizona, California, Hawaii, Nevada, Guam, Trust Territory of the Pacific Islands, and American Samoa (Region IX); and Alaska, Idaho, Oregon, and Washington (Region X)

-Northwest Regional Laboratory
710 S.W. Second Avenue
Portland, Oregon 97204
Telephone: (503) 248-6853

APPENDIX

INSTRUMENTS TO MEASURE PARENT EDUCATION

The following instruments are reviewed here:*

Instrument	Author(s)
Cognitive Home Environment Scale	N. Radin and D. Weikart
High/Scope Parent-Child Interaction Checklist and Ratings	--
Home Observation for Measurement of the Environment	B. Caldwell et al.
Mutual Problem-Solving Task	A.S. Epstein et al.
Parent as a Teacher Inventory and Profile	R.D. Strom and H.B. Slaughter
Parental Attitude Checklist	R.D. Boyd and K.A. Stauber
Parental Behavior Inventory	R.D. Boyd and K.A. Stauber

* An additional instrument, the Home Base Survey and Parent Survey, adapted from the Follow Through Parent Education Model, was also reviewed in earlier draft of this resource book. Unfortunately, the program in which it was developed has been discontinued and the survey is no longer available.

TITLE	Cognitive Home Environment Scale (CHES) (maternal and paternal forms available)
AUTHOR	Norma Radin and David Weikart
DISTRIBUTION SOURCE	School of Social Work University of Michigan Ann Arbor, Michigan 48109 also available from ETS Test Collection Tests in Microfiche #007267
DATE OF DEVELOPMENT	Circa 1966
COPYRIGHT DATES	Material not copyrighted
MATERIALS AND COSTS	Material available without charge
PURPOSE	To measure the degree of cognitive stimulation in the home by probing attitudes, home activities, and possessions related to education
WHO IS EVALUATED (Child or Parent)	Parent (mother or father)
SPECIAL FEATURES OF TARGET POPULATION	The CHES was designed for use with parents of disadvantaged children in a compensatory preschool program.
FORMAT	The CHES is a semi-structured questionnaire, adapted from the Wolf Environmental Process Variable Scale. It contains 25 items scored on a 7-point rating scale.
HOW ADMINISTERED (Including Home)	Interviewer codes parent's answers to questionnaire
WHO ADMINISTERS	Interviewer, such as a teacher or external evaluator

TRAINING NECESSARY FOR ADMINISTRATION	The CHES is administered entirely as a questionnaire, asks specific questions about parent and child behavior, and does not involve rating general characteristics or observing behavior. Hence, interviewing skills are necessary for administration, but no formal training with the instrument is required.
TIME TO ADMINISTER	30 minutes
CONTENT: SUBTESTS	The variables examined include parental attitudes toward child and learning, home activities, possessions. The questions cover such areas as the availability of educational and craft items to the child, the grades the parent wants and expects the child to receive in school, the kinds of actitivities the child shares with the rest of the family, and the parent's plans for the child's future education.
GOALS FOR WHICH INSTRUMENT IS APPROPRIATE (Check Where Applicable)	Focus Toward Child: (1) /X/ Change in Knowledge (2) /X/ Change in Attitude (3) /X/ Change in Function Focus Toward School Services and Personnel: (4) / / Change in Knowledge (5) / / Change in Attitude (6) / / Change in Function Focus Toward Personal Needs of Parents as Adults: (7) / / Change in Knowledge (8) / / Change in Attitude (9) / / Change in Function

RELATIONSHIP BETWEEN PARENT CHANGE AND CHILD CHANGE	The CHES is based on the assumption that changes in parental attitudes and child rearing practices may enhance the stimulation of the home environment and, in turn, foster the cognitive competence of the child.
FORMAT FOR PRESENTATION OF RESULTS	The results are primarily presented as factor scores. Analysis using scores on individual items would also constitute an appropriate use of this instrument. Computing a total CHES score is not recommended as it primarily reflects Factor I, Educational Materials in the Home.
INFORMATION AVAILABLE FOR ADMINISTRATION AND USE	See Coding Manual and Final Report (N. Radin and H. Sonquist, "Ypsilanti Public Schools Scale Preschool Program," Final Report, March 1968).
TECHNICAL QUALITY: STANDARDIZATION RELIABILITY AND VALIDITY	Reliability: A reliability test (Radin and Sonquist, 1968) yielded agreement between two independent scorers on 91% of the items. In addition, interobserver reliability on the CHES scores was 94.9% (Epstein and Radin, 1974). Validity: The construct validity has been suggested by a number of studies (Epstein and Radin, 1974). Factor analyses yielded: Educational Materials in the Home, Grades Expected, Future Expectations, Educationally-Oriented Activities, and Direct Teaching. There has been no other technical work to date.

CULTURAL CONSIDERATIONS	Inasmuch as it emphasizes questions about birthday presents, library cards, and encyclopedias in the home, the CHES appears to be biased toward middle-class values. However, it has been used in several studies with lower-class families, and the researchers have observed that "significant and predictable social class differences emerged on four of the five factors, indicating that the CHES is sensitive to the fact that the degree of cognitive stimulation in the home diminishes with decreases in social class status." (Radin and Epstein, 1975)
POTENTIAL USES	The CHES has been used in a range of intervention studies in conjunction with other instruments: (1) to evaluate maternal involvement in a compensatory preschool program; (2) to measure pre- and post-intervention changes in child-rearing attitudes and practices of lower-class mothers of pre-school children; (3) to examine the relationship of paternal responses to a child-rearing questionnaire with observed paternal behavior and measures of child competence. The developers believe the CHES could be useful as a before and after measure to determine the impact of a program directed at enhancing parents' perceptions of themselves as teachers and in predicting the cognitive competence of children.
REFERENCES	Related Research: Epstein, A.S. & Radin, N., "Paternal Questionnaire Data and the Preschool Child," University of Michigan, 1975. Radin, N., "Child Rearing Antecedents of Cognitive Development in Lower-Class Preschool Children." Doctoral dissertation. University of Michigan, 1969a. (University Microfilms, 1970, No. 70-4170) Radin, N., "The Impact of a Kindergarten Home Counseling Program," Exceptional Children, 1969b, 36, 251-256. Radin, N., "Three Degrees of Maternal Involvement in a Preschool Program: Impact on Mothers and Children," Child Development, 1972, 43, 1355-1364. Radin, N. & Epstein, A.S., "Observed Paternal Behavior with Preschool Children," University of Michigan, Final Report, April 1975. Wittes, G. & Radin, N., "Two Approaches to Group Work With Parents in a Compensatory Preschool Program," Social Work, 16, 1, January 1971, pp. 42-50. Reviews: Johnson, Orval G., Tests and Measurements in Child Development: Handbook II, Volume 2. San Francisco: Jossey-Bass Publishers, 1976, p. 757-759.
COMMENTS	This is one of the few measures that purports to assess father-child interaction.

TITLE	High/Scope Parent-Child Interaction Checklist and Ratings (PCIC)
AUTHOR	--
DISTRIBUTION SOURCE	High/Scope Educational Research Foundation 600 North River Street Ypsilanti, Michigan 48197
DATE OF DEVELOPMENT	1977
COPYRIGHT DATES	Material not copyrighted
MATERIALS AND COSTS	Manual and materials available from High/Scope. In lieu of fees, users are asked to share their findings.
PURPOSE	To measure the dimensions of parent-child interaction during routine caregiving activities
WHO IS EVALUATED (Child or Parent)	Parents and children
SPECIAL FEATURES OF TARGET POPULATION	The instrument was originally developed for research in parent-child interaction with parents of infants and toddlers.
FORMAT	Parents and children are videotaped at home during a feeding or diapering situation, then the taped interactions are coded at 10-second intervals according to several checklist categories. The observer also rates the incidence of several more general behaviors from low to high on a 5-point scale.
HOW ADMINISTERED (Including Home)	Parents and children are videotaped at home.
WHO ADMINISTERS	Observer, who in the original research was a graduate student assistant

TRAINING NECESSARY FOR ADMINISTRATION	A moderate amount of training is necessary to develop reliable observers familiar with the coding categories.
TIME TO ADMINISTER	Approximately 15 minutes
CONTENT: SUBTESTS	In addition to coding the Checklist categories of physical and verbal interactions, affect, and patterns of initiation-response, observers are asked to rate several more general qualities of the same activity, such as the overall comfort and safety of the environment, stimulation in the environment, effectiveness of parent as problem-solver.
GOALS FOR WHICH INSTRUMENT IS APPROPRIATE (Check Where Applicable)	Focus Toward Child: (1) /X/ Change in Knowledge (2) /X/ Change in Attitude (3) /X/ Change in Function Focus Toward School Services and Personnel: (4) /__/ Change in Knowledge (5) /__/ Change in Attitude (6) /__/ Change in Function Focus Toward Personal Needs of Parents as Adults: (7) /__/ Change in Knowledge (8) /__/ Change in Attitude (9) /__/ Change in Function

RELATIONSHIP BETWEEN PARENT CHANGE AND CHILD CHANGE	Use of the PCIC is based on the assumption that the categories reflect dimensions of parent-child interaction which are salient in children's growth as learners.
FORMAT FOR PRESENTATION OF RESULTS	PCIC observation sheet and PCI rating sheet for individual results
INFORMATION AVAILABLE FOR ADMINISTRATION AND USE	Manual on administration and scoring available from High/Scope
TECHNICAL QUALITY: STANDARDIZATION RELIABILITY AND VALIDITY	Reliability: For the Checklist, inter-observer reliability, defined as percentage of agreement, ranged from 76.5% to 100%, with a mean overall scale of 88.4%. For the Ratings, inter-observer reliability ranged from 80% to 100%, with an average across all scales of 91.4%. Validity: There has been no other technical work to date.

CULTURAL CONSIDERATIONS	The authors intended to make the instrument as universal as possible.
POTENTIAL USES	The instrument could be used as a pre- and post-measure to document changes in parents' style of interaction.
REFERENCES	Related research Epstein, Ann S. & Evans, Judith, "Parent-Child Interaction and Children's Learning," in The High/Scope Report, No. 4, 1979, pp. 39-44. Reviews No published reviews available to date
COMMENTS	High/Scope has developed several other means of assessing parent education that may be of potential interest: Mutual Problem-Solving Task Infant Education Interview

TITLE	Home Base Survey and Parent Survey
AUTHOR	Adapted from the Follow Through Parent Education Model: Home Environment Review
DISTRIBUTION SOURCE	Project Home Base Yakima Public Schools 104 N. 4th Ave. Yakima, Washington 98902
DATE OF DEVELOPMENT	1975
COPYRIGHT DATES	Material not copyrighted
MATERIALS AND COSTS	Materials available without charge
PURPOSE	To measure the success of the program in supporting and enhancing the mother's parenting/teaching behavior
WHO IS EVALUATED (Child or Parent)	Parent
SPECIAL FEATURES OF TARGET POPULATION	These surveys were designed for use with children from low-income homes.
FORMAT	The surveys consist of a series of brief questions which are answered on a scale of strongly agree to strongly disagree, plus a series of open-ended questions soliciting parent comments.
HOW ADMINISTERED (Including Home)	The interviewer records parents' answers to the questionnaire and makes some more global observations about stimulation available in the home.
WHO ADMINISTERS	Paraprofessional parent educator in the home

TRAINING NECESSARY FOR ADMINISTRATION	As part of their general duties, paraprofessional parent educators receive pre- and inservice training. No specialized training is required to administer the surveys.
TIME TO ADMINISTER	30 minutes
CONTENT: SUBTESTS	The Home Base Survey collects information on child development, school related activities and teaching. In the parent survey, parents are asked how their attitudes have changed, how the child's behavior has changed, perception of self as teacher, learning stimuli available in the home environment.
GOALS FOR WHICH INSTRUMENT IS APPROPRIATE (Check Where Applicable)	Focus Toward Child: (1) /X/ Change in Knowledge (2) /X/ Change in Attitude (3) /X/ Change in Function Focus Toward School Services and Personnel: (4) / / Change in Knowledge (5) / / Change in Attitude (6) / / Change in Function Focus Toward Personal Needs of Parents as Adults: (7) / / Change in Knowledge (8) / / Change in Attitude (9) / / Change in Function

RELATIONSHIP BETWEEN PARENT CHANGE AND CHILD CHANGE	One premise of this program is that parent change will be reflected by child change. Hence, the program has set a concrete objective: children who have been exposed to the home intervention/parent education activities will be able to perform better on the Preschool Inventory (Educational Testing Service, Princeton, N.J., 1967) with statistical significance set at the .05 level of confidence. In addition, children will perform 92.5% of the tasks taught them by their mothers, measured by means of an interview and observation instrument completed by the parent educator following each home visit.
FORMAT FOR PRESENTATION OF RESULTS	The Home Base Survey is used primarily as an initial screening instrument but could be compared post-intervention to document changes. The Parent Survey is compiled and presented as aggregate percentages.
INFORMATION AVAILABLE FOR ADMINISTRATION AND USE	None available.
TECHNICAL QUALITY: STANDARDIZATION RELIABILITY AND VALIDITY	No technical work has been done to date.

CULTURAL CONSIDERATIONS	
POTENTIAL USES	These surveys have been used pre- and post-intervention in conjunction with direct measures of child change, such as Caldwell's Preschool Inventory and the Alpern & Boll Developmental Profile.
REFERENCES	Related research: No additional citations are available. Reviews: No published reviews available to date
COMMENTS	These surveys, aimed at documenting parent satisfaction and home stimulation, are easy to administer and to respond to, and appear to provide useful information. Its developers, however, are not completely satisfied with them and have revised them several times, feeling unable to find a standardized instrument that can measure program impact.

TITLE	Home Observation for Measurement of the Environment Infant Version (ages 0-3) Preschool Version (ages 3-6)
AUTHOR	Infant Version: B. Caldwell, J. Heider, and B. Kaplan (1966 version); B. Caldwell, R. Bradley, and R. Elardo (1972 version). Preschool Version: B. Caldwell and R. Bradley
DISTRIBUTION SOURCE	Center for Child Development and Education University of Arkansas at Little Rock 814 Sherman Little Rock, Arkansas 72202
DATE OF DEVELOPMENT	Infant Version: 1966, revised in 1972 Preschool Version: 1968, revised in 1978
COPYRIGHT DATES	1978
MATERIALS AND COSTS	Specimen Set - $3.00
PURPOSE	To measure the quality and quantity of stimulation found in the early home environment by sampling aspects of the social, emotional, and cognitive support available to a young child within his or her home Intended primarily as a screening instrument.
WHO IS EVALUATED (Child or Parent)	Parent and child interacting in home
SPECIAL FEATURES OF TARGET POPULATION	This instrument was designed for use with children at risk of developmental delay due to environmental deprivation.
FORMAT	Infant: Consists of a checklist of 45 items or statements (originally 72 items) which the interviewer scores as yes or no Preschool: Consists of a checklist of 55 items (originally 80 items) which the interviewer scores as yes or no
HOW ADMINISTERED (Including Home)	Both versions are completed by a single external evaluator through interviews and observation with both the parent and child present in the home.
WHO ADMINISTERS	Interviewer

TRAINING - NECESSARY FOR ADMINISTRATION	Interviewers are not required to have professional background, but practice in the use of this instrument is necessary for valid data collection because the instrument is scored on a yes/no basis and does not involve gradations within an item. Training to administer HOME can be fairly brief.
TIME TO ADMINISTER	Approximately one hour
CONTENT: SUBTESTS	The selection of items was guided by empirical evidence of the importance of certain types of experience for nourishing the behavioral development of the child. Items were chosen to represent these areas: frequency and stability of adult contact; amount of developmental and vocal stimulation; need gratification; emotional climate; avoidance of restriction on motor and exploratory behavior; available play materials; and home characteristics indicative of parental concern with achievement. For example, observer notes mother's use of physical punishment; whether child is encouraged to learn colors or numbers; how mother expresses warmth to child; whether home appears safe and reasonably clean; what types of books and toys are available.
GOALS FOR WHICH INSTRUMENT IS APPROPRIATE (Check Where Applicable)	Focus Toward Child: (1) /X/ Change in Knowledge (2) /X/ Change in Attitude (3) /X/ Change in Function Focus Toward School Services and Personnel: (4) / / Change in Knowledge (5) / / Change in Attitude (6) / / Change in Function Focus Toward Personal Needs of Parents as Adults: (7) / / Change in Knowledge (8) / / Change in Attitude (9) / / Change in Function

RELATIONSHIP BETWEEN PARENT CHANGE AND CHILD CHANGE	Use of this instrument is based on the assumption that changes in parent knowledge and understanding will ultimately lead to changes in the child's developmental status. It is important to note that the instrument itself does not directly measure child changes, and is therefore often used in conjunction with other measures of child change.
FORMAT FOR PRESENTATION OF RESULTS	The final product may be reported as a single total numerical score, or results may be given as factor scores.
INFORMATION AVAILABLE FOR ADMINISTRATION AND USE	See "Instructions for Administration," pp. 88-115, in Home Observation for Measurement of the Environment, Bettye M. Caldwell, 1978.
TECHNICAL QUALITY: STANDARDIZATION RELIABILITY AND VALIDITY	Psychometric characteristics of the HOME have been examined extensively, based on data collected on families in Little Rock, Arkansas (Infant version - 174 families; Preschool version - 238 families) and the instrument has been through a number of standardization procedures. Reliability: Infant version--A Kuder-Richardson 20 coefficient was computed at r=.89 for the total scale. For the subscales, reliability ranged from very low to very high, e.g., r=.44 (subscale III, Organization of Physical and Temporal Environment) to r=.89 (subscale VI, Opportunities for Variety in Daily Stimulation). Preschool version: A Kuder-Richardson 20 coefficient was computed at r=.93 for the total scale. For the subscales, reliability ranged from very low to very high, e.g., r=.53 (Subscale VI, Modeling and Encouragement of Social Maturity) to r=.83 (Subscale II, Physical Environment: Safe, Clean, and Conducive to Development). Validity: Infant version--The authors report high correlations with IQ (up to .83) and language (up to .64). Moderate correlations were reported with SES. Has been reported to discriminate between high risk and normal homes. Preschool version--Authors report high correlations with IQ (up to .64). Moderate correlations with later achievement (up to .55) and with SES were also reported. Factor analysis of the infant version yielded: 1. emotional and verbal responsivity of the mother; 2. avoidance of restriction and punishment; 3. organization of the physical and temporal environment; 4. provision of appropriate play materials; 5. maternal involvement with child; 6. opportunities for variety in daily stimulation. Factor analysis of the preschool version resulted in: 1. stimulation through toys, games, and materials; 2. language stimulation; 3. physical environment; 4. pride, affection, and warmth; 5. stimulation of academic behavior; 6. modeling and encouraging of social maturity; 8. variety of stimulation; 9. physical punishment.

CULTURAL CONSIDERATIONS	The authors are sensitive to issues of discrimination which may occur in a measure of the "quality of life." Caldwell (1978) states that "every attempt was made to include items that represent stimulation and support but do not necessarily mean money, social status, or education. Thus, from the standpoint of the Inventory, a trip to the grocery store gets as much credit as a trip to the art museum, in that both are likely to be interesting, informative, and stimulating to the young child."
POTENTIAL USES	The infant version of HOME has been used in a variety of research, including studies of malnutrition, language development, cognitive development, school competence, high risk families, and program evaluation. While the actual extent of use is difficult to gauge, it is known to be quite large, with the instruments having been translated into several foreign languages for use in other countries.
REFERENCES	Related Research: Bradley, R., & Caldwell, B. Early home environment and changes in mental test performance in children from 6 to 36 months. Developmental Psychology, 1976, 12, 93-97. Bradley, R., & Caldwell, B. Home observation for measurement of the environment: A validation study of screening efficiency. American Journal of Mental Deficiency, 1977. 81(5), 417-420. Caldwell, B. Home observation for measurement of the environment, 1978. Caldwell, B., Elardo, P., & Elardo, R. "The Longitudinal Observation and Intervention Study: A Preliminary Report." Presented at the meeting of the Southeastern Conference on Research in Child Development, Williamsburg, Virginia, April, 1972. Caldwell, B., Heider, J., & Kaplan, B. "The Inventory of Home Stimulation." Paper presented at the meeting of the American Psychological Association, September 1966. Elardo, R., Bradley, R., & Caldwell, B. The relation of infants' home environments to mental test performance from 6 to 36 months: A longitudinal analysis. Child Development, 1975, 46, 71-76. Reviews: Johnson, Orval G., Tests and Measurements in Child Development. Handbook II, Volume 2, San Francisco: Jossey-Bass Publishers, 1976, pp. 796-799. Johnson, Terri Z., Annotated Directory of Environmental Assessment Instruments, Individualized Data Base, University Research Group at Pacific State Hospital, Pomona, California, September 1978.

TITLE	Mutual Problem-Solving Task (MPST)
AUTHOR	Anne S. Epstein, Pam Schwartz, Judith Meece
DISTRIBUTION SOURCE	High/Scope Educational Research Foundation 600 North River Street Ypsilanti, Michigan 48197
DATE OF DEVELOPMENT	1975
COPYRIGHT DATES	Material not copyrighted
MATERIALS AND COSTS	A manual on development and administration, including definitions of coding categories and code sheets, is available from High/Scope. In lieu of fees, users are requested to share their findings.
PURPOSE	To examine the variety of mother-child interaction and teaching styles used in accomplishing a particular task
WHO IS EVALUATED (Child or Parent)	Parent and child in home
SPECIAL FEATURES OF TARGET POPULATION	The instrument was originally developed as a follow-up measure of mother-child interaction in 53 working-class families who participated in the 1968-70 Ypsilanti-Carnegie Infant Education Project.
FORMAT	The MPST involves systematically observing mother-child interaction during a cookie-baking activity. Cookie-baking was designed to be a standard situation analogous to home visit 'teaching' situations in the infant education program. Observers introduce themselves to both the mother and the child and deliver a set of specified introductory remarks outlining the research procedure.
HOW ADMINISTERED (Including Home)	The interviewer observes mother-child interactions at home during prescribed cookie-baking activity, codes behavior at 10-second and 5-minute intervals, fills out a rating scale, and conducts an interview consisting of open-ended questions.
WHO ADMINISTERS	Interviewer -- in the original research, these were graduate student assistants -- who are trained in using the instrument

TRAINING NECESSARY FOR ADMINISTRATION	In the original research, the explicit instructions for the interviewers included about 40 hrs. of training in administering and coding. Because administration is done as live observation, training is relatively important, but can be done locally. A complicated series of categories must be mastered to code the style and content of both mother's and child's behavior. The major coding groups, each with several categories, are: affect, task involvement, requests for assistance, and responses giving assistance. In addition, the behaviors are categorized as verbal and/or physical, supportive or restrictive, and convergent or divergent.
TIME TO ADMINISTER	30 to 60 minutes
CONTENT: SUBTESTS	The MPST measures several aspects of a mother's teaching style and the mutual influence between mothers and children. Four separate measures are included: Interaction Category System, Content Checklist, Rating Scale, and Maternal Interview. It focuses on positive and negative verbal communication, effectiveness of communication, patterns of initiation-response and levels of activity-passivity of mother and child. For instance, the Maternal Interview asks about the kinds of activities which the mother and child share, the appropriateness of maternal expectations and behavior, and the mother's awareness of how she interacts with her child.
GOALS FOR WHICH INSTRUMENT IS APPROPRIATE (Check Where Applicable)	Focus Toward Child: (1) /X/ Change in Knowledge (2) /X/ Change in Attitude (3) /X/ Change in Function Focus Toward School Services and Personnel: (4) / / Change in Knowledge (5) / / Change in Attitude (6) / / Change in Function Focus Toward Personal Needs of Parents as Adults: (7) / / Change in Knowledge (8) / / Change in Attitude (9) / / Change in Function

RELATIONSHIP BETWEEN PARENT CHANGE AND CHILD CHANGE	The authors state that "the purpose of this measure is to determine whether mothers are able to support their children's goal-directed behavior rather than instruct them in a particular task." It is also based on belief that mothers' behavior and children's performance are reciprocal -- continuously engaged in a process of mutual initiation and response.
FORMAT FOR PRESENTATION OF RESULTS	The MPST was originally developed for a follow-up study of a parent-infant program, and the findings were presented as an aggregate. They are presently being included in a monograph for dissemination to professionals.
INFORMATION AVAILABLE FOR ADMINISTRATION AND USE	"The Mutual Problem-Solving Task: Development, Instrument Procedures and Reliability," A. Epstein, P. Schwartz, J. Meece, High/Scope Educational Research Foundation, February, 1977.
TECHNICAL QUALITY: STANDARDIZATION RELIABILITY AND VALIDITY	Reliability: Interobserver reliability was computed using Cartwright's (1956) alpha, averaging 93.0% in coding mothers' behavior and 19.5% in coding children's behavior. The average across all categories combined was 92.4%. Validity: There has been no other technical work to date.

CULTURAL CONSIDERATIONS	The authors interded to make the instrument as universal as possible. For instance, the recipes used in the MPST are illustrated and color-coded so that the mothers, some of whom cannot read, as well as the children who have difficulty reading, can still follow the recipe without having to ask the observer to read it for them. A choice of two recipes is offered, and all the necessary ingredients and utensils are provided to insure standardization.
POTENTIAL USES	Although the MPST was originally developed for a longitudinal evaluation of mothers and first graders who had been in a parent-infant program, it may also be used for evaluation with parents, needs assessment, or teaching and training activities. The authors believe that its complexity will permit numerous kinds of data analyses to be performed. Some possibilities include: comparing groups on the frequency of their behavior in various categories and their frequencies of different responses to interview questions; examining patterns of initiation and response in mother-child interactions and perhaps developing "typologies" of interactive styles; and studying the relationship between these patterns of mother-child interaction and measures of the child's learning. However, the complexity of the instrument and its scoring procedures may also limit its usefulness. The developers suggest simplifying the instrument and adapting it to users' needs, for instance by selecting certain aspects of the coding categories.
REFERENCES	Related Research Epstein, Ann S. & Evans, Judith, "Parent-Child Interaction & Children's Learning," in The High/Scope Report, No. 4, 1979, pp. 39-44. Epstein, Ann S., Schwartz, Pam, & Meece, Judith, "The Mutual Problem-Solving Task: Development, Instrument Procedures & Reliability," High/Scope Educational Research Foundation, Ypsilanti, Michigan, February, 1977. Reviews No published reviews available to date
COMMENTS	High/Scope has developed several other measures of assessing parent education that may be of potential interest. These include: High/Scope Parent-Child Interaction Checklist and Ratings (for children 0-2); Infant Education Interview

TITLE	Parent As A Teacher Inventory (PAAT) and Parent As a Teacher Profile
AUTHOR	Robert D. Strom and Helen B. Slaughter
DISTRIBUTION SOURCE	Department of Education Arizona State University Tempe, Arizona 85281
DATE OF DEVELOPMENT	Form A - 1972; revised for Form B - 1974
COPYRIGHT DATES	Material not copyrighted
MATERIALS AND COSTS	Parent As a Teacher Inventory) Both available for Parent As a Teacher Profile) research without charge
PURPOSE	To measure child-rearing expectations and the impact of parent education upon parent-child interaction variables Intended as a means for assessing parental strengths and needs in rearing preschool children
WHO IS EVALUATED (Child or Parent)	Parent
SPECIAL FEATURES OF TARGET POPULATION	The instrument was originally developed for use in a Title I program that enrolled a high proportion of children of Mexican-American and Native American heritage.
FORMAT	The instrument is an attitude scale of 50 items in which individual parents of preschoolers or primary students describe their feelings about aspects of the parent-child interactive system, their criteria of judgement for assessing child behavior and their value preferences and frustrations concerning child behavior.
HOW ADMINISTERED (Including Home)	The test can be administered in groups or individually.
WHO ADMINISTERS	Interviewer or self-administered

TRAINING NECESSARY FOR ADMINISTRATION	For self-administration, no training is needed. The instrument was designed to be easily read and understood. Administration by an interviewer usually relies on a program staff member who would be sensitive to parents' comments.
TIME TO ADMINISTER	15 to 30 minutes depending on method of administration
CONTENT: SUBTESTS	Parents are asked about their responses to a wide variety of specific interactions with their child. The Accompanying Profile divides the responses into 5 areas of parent curriculum with 10 items each: (1) parental acceptance of child's creative development; (2) frustration about child-rearing; (3) parent feelings about control and discipline; (4) understanding of children's play and its influence on child development; (5) parental self-confidence as a teacher. In sum, the PAAT explores what parents expect of their child and how they perceive themselves as teachers.
GOALS FOR WHICH INSTRUMENT IS APPROPRIATE (Check Where Applicable)	Focus Toward Child: (1) /X/ Change in Knowledge (2) /X/ Change in Attitude (3) /X/ Change in Function Focus Toward School Services and Personnel: (4) / / Change in Knowledge (5) / / Change in Attitude (6) / / Change in Function Focus Toward Personal Needs of Parents as Adults: (7) /X/ Change in Knowledge (8) /X/ Change in Attitude (9) /X/ Change in Function

RELATIONSHIP BETWEEN PARENT CHANGE AND CHILD CHANGE	The instrument was developed from an extensive search of the literature regarding aspects of a parent's attitudes and behavior that influence child development. Because these variables are seen as inter-related, the PAAT focuses on parent-child interaction as a system rather than upon either parents or children as separate agents.
FORMAT FOR PRESENTATION OF RESULTS	Each item has four possible answers which are assigned a numerical value of 4, 3, 2, or 1: strong yes, yes, no, strong no. A total numerical score is obtained by summing the values of all 50 items. A numerical score can also be derived for each of the five subsets. The authors feel that information provided by the latter approach is more readily used by parents.
INFORMATION AVAILABLE FOR ADMINISTRATION AND USE	See "Administration and Scoring," in Strom, R.D. and H.B. Slaughter, The Development of the PAAT Inventory, 1976, pp. 15-17. The PAAT Profile is intended to accompany the Inventory to insure uniformity of interpretation as a guide for feedback to the individual parent, and as an aid to program planning.
TECHNICAL QUALITY: STANDARDIZATION RELIABILITY AND VALIDITY	The PAAT Inventory has been field-tested in a number of ESEA Title I projects in the Southwest. It is one of few instruments which have received some systematic attention to quality control. Reliability: Reliability of the instrument appears fairly high, with several studies yielding reliability coefficients ranging from .76 to .88. Validity: A validity measure (Johnson, 1975) indicated 60% consonance between feelings and behavior.
CULTURAL CONSIDERATIONS	Strom and Slaughter (1976) observe that "differences in child rearing expectations related to ethnic and social class membership may influence the success of particular parent education strategies." The instrument provides useful information for assessing and specifying the effect of cultural, socioeconomic status, ethnic, and sex role variables upon child-rearing beliefs and practices. PAAT has been translated into French, Spanish, Navajo, Hopi, Italian, and Greek versions.

POTENTIAL USES	The authors believe that data from the PAAT identify parents' teaching strengths and needs in a form that educators can use for guidance and curriculum planning. It has also proved useful as a measure of changes in the abilities and attitudes of parents which result from training programs. In the Parent and Child Education Project (PACE) in Tucson, the PAAT was used in conjunction with Caldwell's Preschool Inventory and a questionnaire for parents' evaluation of the program.
REFERENCES	Related research: Elmquist, M. "An Assessment of Anglo-American Parent Child-rearing Feelings and Behaviors." Unpublished doctoral dissertation. Arizona State University, Tempe, 1975. Johnson, A. "An Assessment of Mexican-American Parent Child-rearing Feelings and Behaviors." Unpublished doctoral dissertation. Arizona State University, Tempe, 1975. Slaughter, H.B. "The Parent As a Teacher Inventory Field Study." Mimeographed report. Research Department of the Tucson, Arizona, Public Schools, 1974. Strom, R.D. and Slaughter, H.B., "The Development of the PAAT Inventory." Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, California, April 21, 1976. Strom, R.D. and Slaughter, H.B., "Measurement of Childrearing Expectations Using the Parent as a Teacher Inventory." Journal of Experimental Education. 1978, 46, 44-53. Strom, R.D. and Johnson, A. "The Parent as a Teacher," Education, 1974, 19, 40-43. Reviews: Johnson, Orval G. Tests and Measurements in Child Development Handbook II, volume 2, Jossey-Bass Publishers, San Francisco. 1976, pp. 829-831.
COMMENTS	

TITLE	Parental Attitude Checklist
AUTHOR	R.D. Boyd and K.A. Stauber
DISTRIBUTION SOURCE	Cooperative Educational Service Agency 12 412 E. Slifer St., Box 564 Portage, Wisconsin 53901
DATE OF DEVELOPMENT	1977
COPYRIGHT DATES	Material not copyrighted
MATERIALS AND COSTS	Material available without charge
PURPOSE	To assess parent attitudes and knowledge about teaching and child management techniques
WHO IS EVALUATED (Child or Parent)	Parent
SPECIAL FEATURES OF TARGET POPULATION	The instrument was developed for use by home teachers in an individualized program for families with a preschool handicapped child after a literature search revealed that no appropriate instrument was available.
FORMAT	Parents rate their attitudes and behavioral reactions to 21 specific teaching and child management situations along a 5-point scale ranging from "never" to "always."
HOW ADMINISTERED (Including Home)	Self-explanatory form to be administered on a pre-/post-test basis
WHO ADMINISTERS	Self-administered

TRAINING NECESSARY FOR ADMINISTRATION	None. In the original research, the checklist was administered by a research assistant.
TIME TO ADMINISTER	15 minutes
CONTENT: SUBTESTS	The checklist measures parents' knowledge of/participation in child management techniques and teaching. More important dimensions include reinforcement, correction and use of instructional aids. Parents are asked about their role as teacher, their self-confidence, and their attitudes toward child discipline.
GOALS FOR WHICH INSTRUMENT IS APPROPRIATE (Check Where Applicable)	Focus Toward Child: (1) /X/ Change in Knowledge (2) /X/ Change in Attitude (3) /X/ Change in Function Focus Toward School Services and Personnel: (4) / / Change in Knowledge (5) / / Change in Attitude (6) / / Change in Function Focus Toward Personal Needs of Parents as Adults: (7) / / Change in Knowledge (8) /X/ Change in Attitude (9) / / Change in Function

RELATIONSHIP BETWEEN PARENT CHANGE AND CHILD CHANGE	The authors maintain of this and the Parental Behavior Inventory (p. 104) that: "While the ultimate effects must be demonstrable gains in child response, the staying power and preventive capability of early intervention programs hinges upon the acquisition and generalization of appropriate parental teaching and child management behaviors. If parents acquire more appropriate teaching and child management behaviors, and these are enduring change in their repertoire, then perhaps we will begin to approximate preventative programming." Emphasis is placed upon assessing parent-child interactions in terms of an Antecedent-Behavior-Consequent Model, where parental antecedent and consequent events serve to evoke and maintain child behavior.
FORMAT FOR PRESENTATION OF RESULTS	Ratings yielded by the checklist offer representative knowledge of the parent's strengths and weaknesses, and help indicate specific responses that can be targeted for change.
INFORMATION AVAILABLE FOR ADMINISTRATION AND USE	See "Guidelines for Administration" available from Boyd and Stauber.
TECHNICAL QUALITY: STANDARDIZATION RELIABILITY AND VALIDITY	Reliability: To assess inter-rater reliability, a random sample of knowledge measures was independently scored by both the research assistant and a program staff school psychologist. The Pearson produce-moment statistic yielded an inter-rater coefficient of .95 on pre-test and .96 on post-test. Intra-rater reliability on a sample of questionnaires was found to be .92 on pre-test and .98 on post-test. Validity: There has been no other technical work to date.

CULTURAL CONSIDERATIONS	Cultural issues do not seem to have been important in the development and implementation of the instrument.
POTENTIAL USES	Data provided by the checklist offer a basis for examining group differences as a result of different interventions. However, the developers now believe that the instrument is not very discriminative.
REFERENCES	Related Research Boyd, R.D. and Stauber, K.A., Parent Behavior Inventory: Portage Parent Program, CESA 12, Portage, WI, April 1977. Boyd, R.D., Stauber, K.A., and Bluma, S.M., Instructor's Manual: Portage Parent Program, CESA 12, Portage, WI, April 1977. Shearer, M.S. and Shearer, D.E., "The Portage Project: A Model for Early Childhood Education." Exceptional Children, 1972, 39, 210-217. Johnson, C.A. and Katz, R.C., "Using Parents as Change Agents for Their Children: A Review." Journal of Child Psychology and Psychiatry, 1973, 14, 181-200. Reviews: No published reviews available to date
COMMENTS	Boyd and Stauber have also developed the Parental Behavior Inventory.

TITLE	Parental Behavior Inventory
AUTHOR	R.D. Boyd and K.A. Stauber
DISTRIBUTION SOURCE	Cooperative Educational Service Agency 12 412 E. Slifer St., Box 564 Portage, Wisconsin 53901
DATE OF DEVELOPMENT	1977
COPYRIGHT DATES	1977
MATERIALS AND COSTS	Five copies of instructional materials (parent readings) and five inventories @ $18.00. Instructor's set of 1 instructor's manual, 1 book of parent readings, and 1 inventory @ $10.00.
PURPOSE	To help structure the home teacher's assessment of the parent's skills in both teaching and child management Offers a systematic procedure to account for the amount or type of teaching and management skills acquired by parents
WHO IS EVALUATED (Child or Parent)	Parent, in role as child's primary teacher
SPECIAL FEATURES OF TARGET POPULATION	The instrument was developed for use by home teachers in an individualized program for families with a preschool handicapped child.
FORMAT	The instrument consists of an 80-item checklist. Home teachers observe and informally rate parental performance along an array of teaching and management behavior.
HOW ADMINISTERED (Including Home)	Home teacher codes parent's behavior in home.
WHO ADMINISTERS	Home teacher

TRAINING NECESSARY FOR ADMINISTRATION	The instrument can be administered by professionals or para-professionals if adequate training is provided. The developers used 2-1/2 days of pre-service and inservice training, which included the use of videotapes for practice in coding behavior.
TIME TO ADMINISTER	About 10 minutes. The administration time varies, depending on the particular behavior the observer chooses to code.
CONTENT: -SUBTESTS	The Inventory measures knowledge of and participation in child management techniques and teaching. The home teacher codes the frequency of a variety of teaching behavior used by the parent: materials used; use of reinforcement and punishment; planning, giving directions, and recording progress.
GOALS FOR WHICH INSTRUMENT IS APPROPRIATE (Check Where Applicable)	Focus Toward Child: (1) /X/ Change in Knowledge (2) /X/ Change in Attitude (3) /X/ Change in Function Focus Toward School Services and Personnel: (4) / / Change in Knowledge (5) / / Change in Attitude (6) / / Change in Function Focus Toward Personal Needs of Parents as Adults: (7) / / Change in Knowledge (8) / / Change in Attitude (9) / / Change in Function

RELATIONSHIP BETWEEN PARENT CHANGE AND CHILD CHANGE	See comments on the Parental Attitude Checklist by the same authors (pg. 100).
FORMAT FOR PRESENTATION OF RESULTS	Ratings yielded by the Inventory offer representative knowledge of the parents' strengths and weaknesses, and help indicate specific responses that can be targeted for change. The developers recommend that the observer select a particular behavior as the target for change, and compare frequency counts of the behavior pre- and post-intervention in order to document any changes.
INFORMATION AVAILABLE FOR ADMINISTRATION AND USE	Instructor's manual Behavior code definitions
TECHNICAL QUALITY: STANDARDIZATION RELIABILITY AND VALIDITY	Reliability: A trained observer accompanied home teachers on a sample of home visits to determine the accuracy of home teachers independently recording parent behavior. Validity: There has been no other technical work to date. Because the Inventory was developed as an observation tool, not all the items are always scored. Hence, it has undergone no standardization work.

CULTURAL CONSIDERATIONS	Cultural issues do not seem to have been important in the development and implementation of the instrument.
POTENTIAL USES	While the actual extent of use is not known, it appears to be popular, as the developers report that several thousand copies of the materials have been sold. Data provided by the Inventory offer a basis for combining a prescriptive-teaching model with systematic parent training. The authors believe that this approach -- intervention with both parent and child as an interactive system -- holds great promise for programs aimed at disadvantaged or child-abuse populations.
REFERENCES	Related Research Boyd, R.D., & Stauber, K.A., Parent Behavior Inventory: Portage Parent Program, CESA 12, Portage, WI, April 1977. Boyd, R.D., Stauber, K.A., & Bluma, S.M., Instructor's Manual: Portage Parent Program, CESA 12, Portage, WI, April 1977. Shearer, M.S. & Shearer, D.E., "The Portage Project: A Model for Early Childhood Education." Exceptional Children, 1972, 39, 210-217. Johnson, C.A., & Katz, R.C., "Using Parents as Change Agents for Their Children: A Review," Journal of Child Psychology ans Psychiatry, 1973, 14, 181-200. Reviews No published reviews available to date
COMMENTS	Boyd and Stauber have also developed the Parental Attitude Checklist.

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